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WOODRUFF'S

[1961]

DESCRIPTIVE
LIST OF

Vegetable Varieties

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F. H. WOODRUFF & SONS, Inc.
MILFORD, CONN., U. S. A.

DESCRIPTIVE LIST OF VEGETABLE VARIETIES

THIRD EDITION



F. H. WOODRUFF & SONS, INCORPORATED
Seed Growers

Main Office
MILFORD, CONNECTICUT, U.S.A.

Cable Address: WOODRUFF MILFORD

F. H. WOODRUFF & SONS, INC.

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Subject to the limitations of liability herein set forth, F. H. Woodruff & Sons, Inc. warrants that the seeds or bulbs sold are as described on the container, within recognized tolerances. Our liability on this warranty is limited in amount to the purchase price of the seeds or bulbs. In no event shall we be liable for the crop, or for any loss due to the failure, impairment of quality thereof or varietal variance therein, whether such loss results from breach of the forgoing warranty, from breach of any other provision of the buyer's contract for purchase of said seeds or bulbs, or from any other cause.

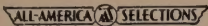


Woodruff's Descriptive List

This descriptive catalog has been prepared to give our dealers and customers access to accurate comparative information concerning the many varieties of vegetables predominantly in demand at the present time. It makes no effort to catalog all the known varieties either of the past or present. In it we have pooled our own trials and breeding experience with that of others to delineate more exactly the various small differences existing among many varieties.

When new varieties have made this information out of date, we expect to make necessary revisions in later editions. At no time do we expect to include in this list novelty varieties which will have no useful place in a descriptive list of vegetables.

Maturity dates noted in this list are the average number of days from seed planting to crop harvest at marketable or canning stage for all those varieties which are usually grown directly from seed. In the case of brussels sprouts, cabbage, cauliflower, celery, eggplant, pepper, tomato, and other crops normally transplanted, the maturity dates indicate time from the setting of plants in the field to crop harvest.

 This symbol appears after the names of varieties which have received recognition in the All-America Selections trials, the type of award and the year being shown also. The All-America Selections trials and awards have been sponsored by the American Seed Trade Association since 1933. New varieties are tested by expert judges in trials held in twenty different locations throughout the United States, and the identities of the varieties are concealed under code numbers to insure impartial judgment. The awards are based on points given for distinctiveness, general usefulness, adaptability and uniformity. Many of these A.A.S. varieties are really outstanding, and each year the announcement of the awards is an event of importance in the seed and vegetable industries.

In this list, the vegetable varieties introduced by F. H. Woodruff & Sons, Inc., are indicated by a star (★) before the name. Varieties considered suitable for quick freezing are indicated by this symbol (†).

The descriptive material presented is based on a compilation of data obtained in our various trial grounds.

ASPARAGUS

Asparagus officinalis

† MARY WASHINGTON

Rust resistant. Developed by U. S. Dept. of Agriculture. Heavy yielder, producing large clusters of early, large, bright green spears with tightly folded purple tinted tips; fine quality and very uniform. Excellent for canning, freezing or market.

† NO. 500 (WASHINGTON 500)

An improved rust resistant Mary Washington strain developed at Davis, California for the freezing trade, earlier, larger and more uniform than Mary Washington with equivalent high quality and yields.

The bracts remain closed even on tall grass and the stalks are dark green, without purple overcast.

BEANS

Phaseolus vulgaris

DWARF GREEN POD



STRINGLESS BLACK VALENTINE

† FREEZING VARIETY

ASGROW STRINGLESS VALENTINE (STRINGLESS BLACK VALENTINE)

ALL-AMERICA SELECTIONS

Silver Medal 1933 52 days

Pods: $6\frac{1}{2}$ -7 x $\frac{3}{8}$ - $\frac{7}{16}$ ", semi-round, curved at tip, stringless, slightly fibrous, dark green. Retains color well in distant shipping.

Bush: 16-18", erect, dark green foliage, very productive.

Seed: Small, oval, jet black.

ANTWERP

Pods: $4\frac{1}{2}$ -5" x $\frac{1}{2}$ - $\frac{9}{16}$ ", flat with prominent seeds in older pods. Almost straight and stringless when young with enough fiber to retain texture upon processing; medium dark green that remains uniform after processing.

Bush: 14-15" tall, moderately vigorous with concentrated set borne within the bush. Productive over a long period.

Seed: Medium sized elliptical and plump. Color is pure chalky white.

† BOUNTIFUL 46-49 days

Pods: $6\frac{1}{2}$ -7 x $\frac{1}{2}$ - $\frac{9}{16}$ ", flat to thick-flat, slightly curved, stringless but fibrous unless picked young, light green. Leading early local market and shipping variety.

Bush: 16-18", erect, medium green, compact, vigorous and prolific.

Seed: Medium size, squared ends, cartridge buff with brown eye spot, becoming darker with age.

BURPEE'S STRINGLESS GREEN POD (LANDRETH STRAIN) 50 days

Pods: $5\frac{1}{2}$ -6" x $\frac{3}{8}$ - $\frac{7}{16}$ ", round to slightly flattened, straight to curved at tip, stringless, fiberless, medium to dark green, excellent quality and flavor. Pods are formed high enough to clear the ground and retain their color well.

Bush: 16-17", slightly spreading, dark green, vigorous, productive.

Seed: Medium size and square ended, coffee and chocolate brown.

CONTENDER

Pods: $7\frac{1}{4}$ " x $\frac{3}{8}$ - $\frac{7}{16}$ ". Round oval, medium to dark green, stringless almost fiberless, medium fleshed at tip under adverse weather conditions. Adapted to long distance shipping and very productive even with high temperature at blossom time.

Plant: 18-20" tall, erect pods borne moderately high thus loss due to ground rots is minimized. Very dark green foliage with large leaflets.

Seed: Buff with darker veining.

DWARF HORTICULTURAL (DWARF CHERRY, DWARF OCTOBER, RUBY, SPECKLED CRANBERRY) 52-55 days

Pods: $4\frac{1}{2}$ -5 x $\frac{5}{8}$ - $\frac{3}{4}$ ", semi-round, straight to slightly curved, stringless, fibrous, light green in snap stage, becoming pale yellow-green, with prominent splashes of scarlet or carmine in shell bean stage, beans prominent in pod. Used for canning in eastern United States. Used also as shell out bean.

† FREEZING VARIETY

Bush: 15-17", slightly sprawling, dark green, coarse foliage, leaflets slightly crumpled; prolific, very vigorous.
Seed: Small, thick oval shape, pink tinged, buff ground color with irregular splotches of carmine or maroon.

DWARF HORTICULTURAL, LONG POD (TAYLOR STRAIN) . . . 52-55 days

Pods: 5-6 x $\frac{9}{16}$ - $\frac{5}{8}$ ", flat at snap stage, oval at shell stage. Stringy, fibrous, light green at snap stage changing to chamois brightly splashed with carmine at shell stage, moderately indented between beans.
Bush: 15-18", erect, moderately vigorous, leaves large dark green, holds pods up well.
Seed: Same as Dwarf Horticultural though slightly larger.

FRENCH HORTICULTURAL 65-70 days

Pods: $5\frac{1}{2}$ -7 x $\frac{5}{8}$ - $\frac{3}{4}$ ", oval, straight to slightly curved, stringy, fibrous, used as shell bean, bright green splashed and streaked with carmine, beans prominent in pods. Our strain is selected for pod length and brilliance of color.
Bush: 20-26", erect, branching with short runners in later stages, bright medium green, very prolific.
Seed: Medium size, almost round, buff with scarlet or carmine splashing.

FULL MEASURE 54 days

Pods: 6- $6\frac{1}{2}$ x $\frac{3}{8}$ - $\frac{7}{16}$ ", semi-round to round, slightly curved, stringless, practically fiberless, dark green, fleshy, brittle, suitable for canning and freezing.
Bush: 18-19", erect, compact, coarse, medium green foliage, not as handy or vigorous as others, but very productive under favorable conditions.
Seed: Medium sized, oval, brownish maroon splashed with buff. Tolerant of mosaic.

GIANT STRINGLESS GREEN POD 53 days

Pods: 6- $6\frac{1}{2}$ x $\frac{1}{2}$ - $\frac{5}{8}$ ", round, straight to curved tip, stringless, fiberless, almost free of parchment, medium to light green, marked indentation between beans.
Bush: 16-17", similar to BURPEE'S STRINGLESS GREEN POD, but more erect plant and coarser foliage, medium green, hardy and productive.
Seed: Medium, oval, ochre brown.

HIGHLAND SULPHUR 52-55 days

Pods: 4-5 x $\frac{3}{8}$ - $\frac{7}{16}$ ", semi-round to round, straight to slightly curved, stringy, fairly free from fiber, light green, beans prominent in pod.
Vines: Similar in type to BURPEE'S STRINGLESS GREEN POD. Hardy, vigorous, prolific strain used in sections of South for early market.
Seed: Small, thick short oval, bright sulphury yellow, with faint greenish or brownish eyespot.

IDAHO REFUGEE, MOSAIC RESISTANT 63 days

Pods: $5\frac{1}{4}$ - $5\frac{1}{2}$ x $\frac{5}{16}$ - $\frac{3}{8}$ ", round, fleshy, brittle, straight, slender, stringless, fiberless, apple-green. Choice canning and freezing strain.

Bush: 15-18", slightly larger and coarser leaflets than in REFUGEE STRING-
LESS, but otherwise identical in plant type.
Seed: Small cylindrical golden brown with small patches of dark violet-
purple.

IMPROVED COMMODORE (DWARF KENTUCKY WONDER)

ALL-AMERICA SELECTIONS Hon. Mention 1945 62-65 days

Pods: 8-9 x $\frac{3}{8}$ - $\frac{7}{16}$ ", round, slightly curved and twisted; refined round pad-
ded KENTUCKY WONDER type, almost stringless and fiberless, medium
dark green, tender, brittle, very good quality.

Bush: 16-18", erect but bushy, dark green, vigorous, coarse leaflets, very
prolific.

Seed: Large, slender kidney shape which is cylindrical in cross section,
mahogany red.

† IMPROVED TENDERGREEN (MOSAIC RESISTANT) 56 days

Pods: 6" long, round, dark green, straight and stringless.

Plant: 16", erect, compact, vigorous, dark green foliage.

Seed: Brownish purple, mottled fawn.

An improved strain of Tendergreen, resistant to mosaic and similar to
the regular strain in most respects, with the exception of being slightly
longer.

An excellent variety for canning, freezing, and market gardens.



KING GREEN

† **★KING GREEN** 55 days
 Pods: $6\frac{3}{4}$ -7" x $\frac{5}{16}$ - $\frac{3}{8}$ ", essentially straight, even in later setting pods, round in cross section, dark-green with no suture pigment. Medium sized calyx knob and moderate styler taper. Flesh dark green, soft in texture, solid, brittle, stringless and fiberless.
 Bush: 16-18" tall, slightly spreading to erect in habit, with scattered pods borne high within the bush. Very vigorous, medium dark-green foliage with medium-size leaflets.
 Seed: Slim, slightly curved with rounded ends. White with two minute tan dots at hilum.
 A new introduction well adapted to manufacture of Baby Food puree and cut beans.

LOGAN 51 days
 Pods: $5\frac{1}{2}$ - $6\frac{1}{2}$ x $\frac{3}{8}$ - $\frac{7}{16}$ ", round, pencil podded, stringless, slightly fibrous, medium dark green, very fleshy.
 Bush: 15", erect, medium green color similar to TENDERGREEN in appearance. Very prolific in South.
 Seed: Medium size, elongated oval, purplish, speckled and splashed with tan.
 Originated by Dr. B. L. Wade at Charleston, S. C. Experimental Station by crossing U. S. NO. 5 REFUGEE and STRINGLESS BLACK VALENTINE. Used extensively in the South. Sets pods under heat and drought. Resistant to powdery mildew, mosaic, and tolerant of bacterial blight.

LONGREEN (TENDERLONG) 56 days
 Pods: $6\frac{1}{2}$ -17 x $\frac{7}{16}$ - $\frac{1}{2}$ ", round, slightly curved, stringless and slightly fibrous at all stages, dark green, fleshy, crisp, and smooth. Similar to TENDERGREEN, but longer podded.
 Bush: 17-18", open, erect, medium dark green.
 Seed: Medium large, oval, kidney shape, dull brown purple spotted with golden to medium brown.

LOW'S CHAMPION (RED CRANBERRY) 55 days
 Pods: $4\frac{3}{4}$ - $5\frac{1}{2}$ x $\frac{1}{2}$ - $\frac{5}{8}$ ", flat, straight, stringless, fibrous, good quality, medium to light green, noticeable indentations between beans. Used for canning in eastern United States.
 Bush: 14-16", erect, large leaved, dark green, vigorous and fairly productive.
 Seed: Large, plump, almost round, blood red, with cream or buff hilum.

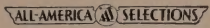
MAMMOTH FAVA, AQUADULCE LONG POD (*Vicia Faba*) . . . 72-78 days
 Pods: 9-16 per plant, usually 10-12, containing 5-7 seeds; $9-10\frac{1}{2}$ inches long by $1-1\frac{1}{4}$ inches wide, straight, blunt, glossy ivory green at shell stage, turning to buckskin or pale buff when past table stage.
 Plant: Erect, with 2-5 branches or divisions originating at base and growing to a height of 30-34 inches.
 Seed: At green shell stage they are large, irregular in shape, slightly wedge shaped, thickest at eye end, $\frac{7}{8}$ x $\frac{3}{4}$ x $\frac{1}{2}$ inch, pale green or ivory color. This is not a true bean, and its seasonal requirements are more nearly like those of peas. Generally used as a green shell bean by nationals of European origin in the U. S.

PLENTIFUL  Bronze Medal 1939 50-54 days
 Pods: 7-7½" x 7/16-1/2", flat to thick flat, straight to curved at tip, stringless, fairly free from fiber, medium green, popular early market and shipping variety.
 Bush: 16-18", erect, medium dark green, hardy and vigorous; very prolific, shows resistance to some strains of rusts.
 Seed: Large, flattened oval, glossy jet black.

† **SLENDERGREEN** 50-53 days
 Pods: 6" x 3/8-7/16", round, slightly curved, slim, dark green, fleshy, fiberless and stringless. Pods remain smooth in larger sieve sizes.
 Plant: 15-17" erect, slightly spreading, medium dense plant with large dark green dense foliage.
 Seed: Large plump oval, dull purple splashed with tan.

STREAMLINER (WHITE SEEDED BOUNTIFUL) 48-52 days
 Pods: 7-9 x 3/8-7/16", flat to thick flat, straight to very slightly curved, stringless, medium green, tender until full maturity. Valuable addition to early market and home garden varieties; also suitable for use as dry bean.
 Bush: 14-18", erect, well branched, compact, medium green, shows some frost tolerance, hardy, vigorous, productive over long period.
 Seed: Medium sized, oval, white.

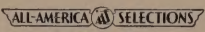
STRINGLESS RED VALENTINE 50-53 days
 Pods: 4½-5" x 3/8-7/16", curved, broad oval to round. Crease back, stringless, fiberless when young. Medium green, brittle, fair quality.
 Bush: 12-15", fairly compact, erect, light to medium green, brittle, fair quality.
 Seed: Medium sized, oval, buff, heavily splashed with red.
 An Old Home Garden variety used in the South.

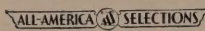
SUPERGREEN  Bronze Medal 53-56 days
 Pods: 6-6½" x 7/16", almost straight, slim, smooth, dark green. Very fleshy and brittle, and of good quality. Stringless and fiberless.
 Bush: 16" tall, slightly spreading, with pods, partially scattered, and borne high within the bush. Coarse, medium green vigorous foliage.
 Seed: Brown mottled with grey.

† **TENDERGREEN (NEW STRINGLESS)**  Gold Medal 1933 53 days
 Pods: 5½-6 x 7/16-1/2", round, curved at tip to slightly curved, stringless, fiberless, medium to dark green, fleshy, brittle, good quality, desirable for freezing.
 Bush: 15-16", very erect, compact, coarse, heavy, dark green foliage, vigorous.
 Seed: Large, plump, oval, dull brown purple splotched with golden to medium brown. Standard variety for market gardeners and processors.

† **TENDERLONG 15** 54 days
 Pods: $5\frac{1}{2}$ "-6" x $\frac{3}{8}$ "- $\frac{9}{16}$ ", round, without creaseback. Slim, uniform, smooth, medium to dark green, fleshy, stringless and fiberless. Remain sleek in higher sieve sizes.
 Plants: 16" spreading. Pods borne throughout plant in long sequence of maturity, with an excellent follow up. Large, vigorous, dark green foliage.
 Seed: Large, plump, dull purple spotted with tan.
 A Tendergreen type resistant to Mosaic 15.

TENNESSEE GREEN POD (BROWN BUNCH) 49-52 days
 Pods: 6-7 x $\frac{5}{8}$ "- $\frac{3}{4}$ ", very broad and flat, curved, stringy, fiberless, medium green, beans prominent in pods, good flavor.
 Bush: 13-17", very branched and spreading, very dark green, hardy, prolific.
 Seed: Medium sized, broad, flat, brown with faint eyespot.

† **TOPCROP**  Gold Medal 1950 52-54 days
 Pods: $5\frac{1}{2}$ " x $\frac{3}{8}$ "- $\frac{7}{16}$ ", round, slightly curved, smooth, slightly creaseback in later stages; flesh thick, entirely stringless and without fiber, medium dark green.
 Bush: 15-16", erect, vigorous, medium light green, pods borne low.
 Seed: Small, oval, brown mottled.
 Immune to common bean mosaic and highly tolerant of "greasy pod."
 Adapted to a wide range of conditions and localities. Developed by Dr. W. J. Zaumeyer of U.S.D.A., Beltsville, Maryland.

WADE  Gold Medal 1952 60 days
 Released by U.S.D.A. Regional Laboratory at Charleston, South Carolina.
 Pods: $6\frac{1}{2}$ " x $\frac{3}{8}$ "- $\frac{9}{16}$ ", dark green, very straight, excellent quality, fiberless and stringless. Pods remain smooth even in later stages of maturity. Have tendency to sunburn. Thick fleshed, dark green, bicolor pods.
 Bush: Upright, concentrated set, well within bush, but pods easily clear the ground. Very vigorous, dark green, large leaflets. Very productive.
 Seed: Unmottled, purplish brown.
 Mosaic resistant, powdery mildew. Ideal for shipping and processing.

† **★WHITE-SEEDED TENDERGREEN** 53 days
 Pods: $5\frac{1}{2}$ " x $\frac{3}{8}$ ". Very straight and smooth, round to slightly oblate in cross section, with uniform index. Dark green, without pigment on suture. A small calyx knob, short neck, abrupt styler taper give minimum snipper losses. Flesh dark green, firm, crisp, and brittle, stringless and fiberless at market stage. Very thick flesh enfolds seed piece.
 Bush: 20-22" tall, slightly spreading in habit with very few basal branches that do not become interlaced. Pods are borne singly rather than in clusters throughout entire bush, minimizing trouble in harvesting. Plant very vigorous with large, slightly crinkled leaves, and does not break apart easily during hand harvesting.
 Seed: Elliptical, plump, and solid white in color.
 A new introduction bred for the canner, freezer and shipper.

† ★ **WOODRUFF'S HYSORE** 58 days

Pods: 6-6 $\frac{1}{4}$ " x $\frac{3}{8}$ ", straight, very smooth, very dark green in color with no suture pigment. Round to heart shape in cross-section. Refined calyx knob, short styler tip. Very firm, fleshy, brittle, and excellent quality. Stringless and fiberless at all times.

Bush: 20-22" tall, very erect in habit with a very concentrated set of pods borne high in the bush. Exceptionally vigorous bush has smooth dark green foliage with large leaves.

Seed: Medium size, elliptical, plump, with brown eye.

A new introduction for Canner, Freezer and Produce Shipper.

DWARF WAX PODDED



KINGHORN SPECIAL WAX

CHEROKEE WAX ALL-AMERICA SELECTIONS Honorable Mention 1948 . 52 days

Pods: 6 $\frac{1}{2}$ x $\frac{7}{16}$ ", oval flat, nearly straight. Tender and stringless at all stages, slightly fibrous, golden yellow, good quality.

Bush: Large and erect, medium green.

Seed: Small, round, kidney, black.

Developed by Dr. W. C. Barnes of South Carolina.

DAVIS STRINGLESS WHITE WAX 51-54 days

Pods: 5 $\frac{1}{2}$ -6 $\frac{1}{2}$ x $\frac{1}{2}$ - $\frac{5}{8}$ ", semi-flat to semi-round, straight, moderately fleshy, stringless but fibrous, fair quality, light yellow. Used as cut bean for canning.

Bush: 14-16", erect, vigorous, bushy, moderately coarse foliage, medium green, very prolific.

Seed: Medium size, long kidney shape, chalky white.

IMPROVED GOLDEN WAX 50-52 days

Pods: $4\frac{1}{2} \times \frac{3}{8}\text{--}\frac{7}{16}$ ", semi-flat, straight, stringless but fibrous, light yellow, fair quality. Used for home gardens.

Bush: 13-16", erect, stocky, medium green, fairly vigorous, moderately productive.

Seed: Medium sized, short oval, white with dark purplish-brown eyespot.

† ★KINGHORN SPECIAL 57 days

Pods: $5\frac{3}{4}\text{--}6\frac{1}{4} \times \frac{3}{8}\text{--}\frac{7}{16}$ ", semi-round to round, generally slightly curved, stringless, thick flesh, almost fiberless, cream to pale golden yellow, superior quality.

Bush: 16-18", vigorous, medium large leaves of medium green color, highly productive under favorable conditions.

Seed: Medium small, long kidney shape; clear white with no eye markings.

Similar to ROUND POD KIDNEY WAX except for clear white seed. Exceptionally good for canning and freezing.

PENCIL POD BLACK WAX 54 days

Pods: $5\frac{3}{4}\text{--}6\frac{1}{4} \times \frac{7}{16}\text{--}\frac{1}{2}$ ", semi-round to round, slightly curved, stringless, fibrous, brittle, tender, very fleshy, bright golden yellow. Very desirable for canning and freezing.

Bush: 14-16", erect, spreading, vigorous, hardy and prolific, medium dark green.

Seed: Small, cylindrical, glossy jet black.

ROUND POD KIDNEY WAX (BRITTLE WAX) 52 days

Pods: $6\text{--}6\frac{1}{2} \times \frac{3}{8}\text{--}\frac{7}{16}$ ", semi-round to round, straight to curved at tip, fleshy, stringless, almost free of fiber, golden yellow. Excellent quality for cut wax beans, whole pack and freezing.

Bush: 15-17", erect, spreading, vigorous, hardy, coarse, medium green foliage, very prolific under good conditions.

Seed: Medium small, kidney shape, white with black eye.

SURE CROP WAX (BOUNTIFUL WAX) 52-55 days

Pods: $5\text{--}6 \times \frac{7}{16}\text{--}\frac{1}{2}$ ", thick-flat, straight to slightly curved, stringless, very little fiber, bright buttery yellow. Most popular of wax podded for early market or home garden.

Bush: Similar to BOUNTIFUL.

Seed: Medium large, oval, jet black.

TOP NOTCH GOLDEN WAX 50 days

Pods: $4\frac{1}{2}\text{--}5 \times \frac{1}{2}\text{--}\frac{5}{8}$ ", flat to semi-round, tender, fleshy, straight to curved at tip, stringless though some fiber, pale yellow.

Bush: 14-16", stocky, erect, compact, medium green, vigorous and prolific.

Seed: Medium size, kidney shape, white with medium to chocolate brown eye. Excellent home and market garden variety.

GREEN PODDED POLE

ALABAMA NO. 1 PURPLE POD 65-70 days

Pods: 6-6½" x ⅜-7/16", rounded, oval, creaseback, moderately fleshy, stringy except at very young stage. Soft dark green stained with dull purple along the sutures, and on the surface of the pod.

Vines: 5½-6", abundant dark green foliage, stained purplish bronze at the nodes.

Seeds: Comparatively small, long oval, glossy black.

Popular in Southern States as a cornfield bean.

BLACK CORNFIELD (IDEAL MARKET, BLACK CREASEBACK, BLACK VALENTINE POLE) 58-61 days

Pods: 5-5½ x ⅜-1/2", thick oval to round, straight to slightly curved, stringless and fiberless when young, light silvery green, fleshy, tender, brittle, excellent quality.

Vines: 3½-4', good climber, medium green foliage, productive, hardy.

Seed: Small, oval, shiny jet black.

† BLUE LAKE STRINGLESS, WHITE SEEDED (WHITE CREASEBACK STRINGLESS) 60 days

Pods: 6¼ x ⅜", round, straight, stringless and fiberless at all stages, dark green, smooth, tender, fleshy, excellent freezing and canning quality.

Vines: 4-5', vigorous, productive, good climber, bears over a long season.

Seeds: Small, oval, white.

Adapted to West Coast. Resistant to common mosaic and some rust strains.

† BLUE LAKE STRINGLESS NO. 231 64 days

Pods: 6¾" x ⅜", stringless and fiberless at all stages. Fully round and dark green. Remain smooth in larger sieve sizes. Fleshy and tender.

Plant: 6' tall, vigorous climber and very productive over long season.

Seed: Small, ivory white.

Adapted to Western snap bean ranges. In addition to excellent canning and freezing qualities, it is resistant to common mosaic and some strains of rust.

† COLUMBIA (2006) 58 days

A new Curly Top and Common Mosaic resistant, stringless Blue Lake type pole bean. This variety has been developed cooperatively by the United States Department of Agriculture and the Washington and Oregon Experiment Stations. Columbia has shown considerable promise as a processing variety in the Western bean areas where it has been in "Commercial" tests for several years.

Pods: 5-5½" long in the No. 4 sieve size. Round, straight, free from creaseback, stringless and fiberless in all stages of development. Pods dark to medium dark green, becoming a little paler in largest sieve size. Pods slim, smooth and free of inch marks and pipe stem; remarkably uniform in all sieve sizes with short calyx necks and abrupt stilar taper to minimize snapped losses. Fleshy pod wall tightly encloses a small seed piece. Processed product very acceptable under present methods of canning and freezing.

Vines: Very vigorous, good climbers under Western conditions. More basal foliage than many standard lines of Blue Lakes but not too dense to interfere with easy harvest. Maturity rapid and more uniform than standard varieties which insures maximum harvest without excessively high percentage of large sieve size pods.

Seed: Small, elliptical, white.

Columbia is earlier maturing than many standard strains of Blue Lakes. The plants have an excellent basal set, borne high enough to clear the ground, as well as an unusually heavy set in the upper levels of the plant. Production is superior to the standard lines of Blue Lakes in absence of Curly Top and Mosaic and will substantially outyield current strains in the presence of these diseases.

Columbia is very well adapted to the Western bean ranges, where resistance to Curly Top and Common Bean Mosaic are valuable characters.

CUTSHORT (RED SPECKLED CUTSHORT, CORN HILL) . . . 72-75 days

Pods: $3\frac{1}{2} \times \frac{5}{16}\text{--}\frac{7}{16}$ " , thick oval to round, slightly curved, fleshy, brittle, almost free of stringiness, slightly fibrous, medium to dark green, fair to good quality.

Vines: 4-5', loose twining, vigorous, medium to dark green, productive over long season.

Seed: Small, variable shape because of being compressed in pods, dingy gray with reddish brown eyespot and splashing.

GENUINE CORNFIELD (SCOTIA, NANCY DAVIS, STRIPED CREASEBACK)

70-73 days

Pods: $5\text{--}6 \times \frac{3}{8}\text{--}\frac{7}{16}$ " , round, straight to slightly curved, stringless while young, moderately fibrous, fleshy, medium green becoming purple splashed. Popular pole bean in the South.

Vines: $4\frac{1}{2}\text{--}5'$, good climber, hardy and vigorous, medium green, prolific.

Seed: Medium small, oval, greenish buff splashed with cinnamon.

† KENTUCKY WONDER (OLD HOMESTEAD, TEXAS PROLIFIC) . . . 65 days

Pods: $7\frac{1}{2}\text{--}9 \times \frac{7}{16}\text{--}\frac{1}{2}$ " , almost round, slightly curved and twisted, rough corrugated surface, brittle and tender, slightly stringy but fiberless, medium green; pods borne in clusters.

Vines: $5\text{--}6\frac{1}{2}'$, good climber, vigorous, hardy, prolific, large leaved, dark green; widely adapted.

Seed: Medium small, very flat, oval, variable shades of gray brown to chocolate brown.

KENTUCKY WONDER, RUST RESISTANT 58-60 days

Pods: $7\text{--}7\frac{1}{2} \times \frac{3}{8}\text{--}\frac{7}{16}$ " , straight to slightly undulate and curved, rounded oval, smoother than KENTUCKY WONDER OR OLD HOMESTEAD, stringless, very little fiber, medium green.

Vines: $4\frac{1}{2}\text{--}5'$, fairly vigorous, good climber, productive, resistant to several strains of rust, dark green.

Seed: Medium small, flat oval, grayish brown.

KENTUCKY WONDER 191, WHITE SEEDED (BURGER'S STRINGLESS GREEN POD) 63-66 days

Pods: 6-7 x $\frac{7}{16}$ - $\frac{9}{16}$ " , thick oval to round, curved, stringless and fiberless, very brittle and tender, fleshy, dull silvery green, excellent quality.

Vines: 4-5', good climber but only moderately vigorous, medium green, fairly productive.

Seed: Medium large, long flat oval, white.

KING HORTICULTURAL (MAMMOTH, HAMPDEN, WORCESTER SPECIAL) 80-85 days

Pods: $5\frac{1}{2}$ - $6\frac{1}{2}$ x $5\frac{3}{8}$ - $\frac{3}{4}$ " , thick oval, slightly curved, stringy, fibrous, tough, unpalatable except when very young, medium green with scarlet splashings.

Vines: 5-7', fairly good climber, not to vigorous or productive but hardy, medium green.

Seed: Very large, very broad, thick oval, color like LONDON HORTICULTURAL.

LAZY WIFE (WHITE CRANBERRY, WHITE CHERRY) 74-78 days

Pods: 5-6 x $5\frac{3}{8}$ - $\frac{3}{4}$ " , broad, flat, beans very prominent, straight, rarely curved, stringless, almost fiberless, fleshy, brittle, fine textured, dark to medium glossy green, good quality.

Excellent home garden snap or shell bean; also used as dry bean.

Vines: 4-4 $\frac{1}{2}$ ' , poor climber at start but rank grower later, productive over long period, medium glossy green.

Seed: Small, almost globular, ivory white.

LONDON HORTICULTURAL (SPECKLED CRANBERRY, WREN'S EGG, SCIPIO) 69-73 days

Pods: 6-7 x $5\frac{3}{8}$ - $\frac{3}{4}$ " , flat oval, straight to slightly curved, stringless, almost fiberless, not fleshy, dark green in snap stage becoming yellow green splashed with bright carmine in shell stage, fair quality.

Vines: 4-4 $\frac{1}{2}$ ' , good climber, vigorous, dark green, prolific.

Seed: Large, broad very plump oval, light buff sparsely splashed with dark red.

McCASLAN 61-65 days

Pods: 7-8 x $1\frac{1}{2}$ - $\frac{9}{16}$ " , broad, flat, irregularly curved, stringless when young, very little fiber, fairly brittle and tender, fair quality, dark green.

Vines: Very similar to KENTUCKY WONDER, WHITE SEEDED but slightly earlier and more productive.

Seed: Medium size, oblong, ivory white.

MISSOURI WONDER (NOXALL, NANCY D.) 63-67 days

Pods: $5\frac{1}{2}$ -6 x $\frac{7}{16}$ - $\frac{1}{2}$ " , thick oval to round, curved, stringy, fibrous, tough, poor quality, medium green, lighter colored than KENTUCKY WONDER.

Vines: 5-6', good climber, dark green, productive, vigorous.

Seed: Large, fairly plump oval, soft gray splashed with drab.

SCARLET RUNNER (*Ph. multiflorus*) 88-93 days

Pods: 5-6 x $1\frac{1}{2}$ - $\frac{5}{8}$ " , broad, thick flat, beans very prominent, straight to very slightly curved, stringless while very young becoming stringy, fibrous and tough in shell bean stage, medium to dark green.

Vines: 12-17', excellent climber, coarse medium dark green foliage, vigorous, hardy, very prolific over long season. Used for ornament.

Seed: Very large, very thick broad oval, reddish purple splashed with blue black.

SPARTAN HALF RUNNER 58-60 days

Pods: 5-5½" long, straight to slightly curved, oval when young, becoming round as berries develop and creaseback when mature; light green to silvery green when young and pale green at prime stage. Stringless when young.

Vine: Very vigorous, much branched at base, a weak climber with many spur-tops. Small dark green leaves are rough textured. Pods borne concentrated at lower levels, becoming more scattered near the top of the plant.

Seed: Buff splashed with dark brown.

A nematode resistant half-runner bean used in the southeast; has a strong flavor reminiscent of pole beans.

TENNESSEE WONDER (BROWN SICKLE, EGG HARBOR, STRIPED SICKLE) 65-68 days

Pods: 7-9 x ¾-5/8", round, straight to partially sickle shaped, beans prominent, almost stringless, fiberless, light green, tender, brittle, coarse textured, fair to good quality.

Vines: 4-4½', good climber, purple shading on entire medium green plant, only moderately productive.

Seed: Medium large, long oval, mottled mouse gray and buff with black striping and eyespot.

WHITE CREASEBACK (BLUE LAKE, WHITE CORNFIELD, FAT HORSE) 63-66 days

Pods: 5½-6 x ¾-7/16", round, slightly curved, tender, fleshy, stringless and fiberless when young, medium green, excellent quality; used in canning and freezing.

Vines: 4-5', good climber, vigorous, productive, dark green foliage, bears over long season.

Seed: Small, oval, ivory white; also suitable for dry shell bean.

WHITE HALF RUNNER 60 days

Pods: 4-4½" x ¾", round, medium green, straight, weak strings, and moderately fiberous. A dry bean that can be used as a snap bean when immature.

Vine: 4½-5", weak climber or spur topped, vigorous and productive.

Seed: Medium size oblong, very plump, oval, pure white.

YARD LONG (ASPARAGUS) 67-73 days

Pods: 18-24 x ¾-7/16", round, straight to long twisting slight curve, fleshy, tender, traces of stringiness, fiberless, fine textured, light green, good quality.

Vines: 5½-6½', vigorous, rank grower, dark, green, productive.

Seed: Very small, angular, oval, reddish brown with black eyespot.

Vining variety of cowpeas (*Vigna sesquipedalis*).

WAX PODDED POLE

KENTUCKY WONDER WAX 60-63 days

Pods: 8-9 x ½-¾", stout, almost straight, squarish in cross section, distinctly creasebacked, with very short curved point, moderately stringy, fiberless when young, very light yellow, very brittle, moderately coarse grained, fair quality.

Vine: 5-6½', medium in size, climbs well, moderately open, very early, productive, dark green.
Seed: Medium size, oblong or reniform, very flat, dark chocolate brown with a varnished appearance.

L I M A B E A N S

Phaseolus Lunatus

B U S H V A R I E T I E S

BURPEE'S BUSH 76-80 days
Pods: 4½-5 x 1-1¼", very flat, curved at tip to slightly curved, dark dull green, large seeded.
Bush: 14-20", erect but semi-sprawling with occasional short runners, vigorous, heavily productive, light to medium green foliage.
Seed: Large, flat, pale green in edible stage; large, broad, oval, rather triangular, flat, dull chalky white in seed stage.

BURPEE'S IMPROVED BUSH 76 days
Pods: 4½-5½ x 1-1¼", flat, medium green, curved, large seeded.
Bush: 16-20", erect, spreading, very vigorous and productive, glossy dark green foliage.
Seed: Large, flat, pale green in edible stage; large, oval, flat, green tinted white in dry stage.



BREEDING GROUNDS AT SACRAMENTO

† ★ **CANGREEN**  Hon. Mention 1943 . . . 65-70 days
Pods: Same shape and size as HENDERSON's but darker with bronze green color when ripe.

Bush: Practically identical with HENDERSON but yield more concentrated.

Seed: Same size but slightly thicker or plumper than HENDERSON, light green integument with flesh or cotyledons of deeper green.

DIXIE WHITE BUTTER PEAS 72 days

Pods: 2" x $\frac{9}{16}$ ", straight, oval with prominent berries, medium dark green in color. Berries very small and distinctly thick.

Bush: 18" erect, medium bushy; dark green, medium size leaflets, very prolific under high temperature.

Seed: Thick, oval. Small, white

EARLY MARKET (U.S. 142)  Bronze Medal 1945 . . . 73 days

Pods: $4\frac{1}{2}$ x $1\frac{1}{8}$ ", medium thick, dark green, curved with 3-4 beans per pod.

Bush: 16-18", spreading, vigorous, dark green, heavy yielder of early beans.

Seed: Large, flat, green in edible stage; broad, flat, greenish cream in dry stage.

† **FORDHOOK** 76 days

Pods: $4\frac{1}{2}$ x $1\frac{1}{8}$ ", thick, plump, medium green, straight.

Bush: 16-19", erect, compact, bushy, dark green, heavily productive on fertile soils, but sensitive to changes in fertility or climate.

Seed: Large, plump, rounded oval, pale green in edible stage; medium size, round to rounded oval, thick, creamy with green tint in dry stage.

† **FORDHOOK 242**  Bronze Medal 1945 . . . 75 days

Pods: $3\frac{1}{2}$ x $1\frac{1}{8}$ ", slightly curved, plump, similar to FORDHOOK BUSH. Holds size on late sets.

Bush: 16-20", erect, compact, slightly spreading, highly productive under most conditions.

Seed: Slightly smaller than FORDHOOK and has appearance of being thicker than FORDHOOK.

Developed by Dr. Roy Magruder and Dr. R. E. Wester of U.S.D.A. at Beltsville, Md., as a highly productive Fordhook type for adverse conditions.

CONCENTRATED FORDHOOK 72 days

Pods: $3\frac{1}{2}$ x $1\frac{1}{16}$ ", straight, rough and constructed between berries, light grey-green in color. Slightly shorter and thicker than Fordhook 242 but berries frequently truncate because of lack of space within pod.

Plant: 15-18" tall, erect, very compact, with many basal spurs and few basal branches. Plant smaller and less vigorous but heavy basal set inhibits secondary blossoming, thus assuring a high uniform yield when vined.

Seed: White tinged with green; smaller than Fordhook and thinner than Fordhook 242.

HENDERSON 67 days
 Pods: 2¾-3¼ x ¾-7⁄8", almost straight, flat, medium green, small seeded.
 Bush: 14-18", erect, compact, bushy, glossy, dark green, fine leaved foliage, very productive.
 Seed: Small, almost round, thin, light green in edible stage; small, round, thin, creamy white in dry state.

JACKSON WONDER (CALICO) 64-68 days
 Pods: 2¾-3¼ x ¾-7⁄8", flat to thick flat, dark green, small seeded.
 Bush: 16-18", almost sprawling, glossy very dark green foliage, hardy, vigorous, productive. Especially noted for its drought and heat tolerance.
 Seed: Small, thick, flat, broad oval, pale buff with streaks of darker color in edible stage; small, flat, oval to triangular, deep buff to dark tan with splashing and striping of purplish black in seed stage.

DIXIE SPECKLED BUTTER PEA 73 days
 A minature lima similiar to white Butterpea in size, maturity, pod length, and appearance.
 Seed: Reddish brown speckled with dark brown.

WOODRUFF'S PROLIFIC 68 days
 Pods: 5-5½ x 1-1¼, straight, flat, medium green, medium size.
 Bush: 16-20", erect, very bushy, glossy dark green, coarse leaved foliage, very prolific.
 Seed: Medium size, pale green, almost round, thin in edible stage; mature beans are medium size, creamy white, thin and roundish.

WOOD'S PROLIFIC 71-76 days
 Pods: 3½-4 x ¾-7⁄8", quite similar to HENDERSON but larger.
 Bush: Identical type with HENDERSON but more vigorous, slightly larger, and a few days later.
 Seed: Same as HENDERSON but larger.

POLE LIMA BEANS

FLORIDA BUTTER SPECKLED 78-80 days
 Pods: 3¼ x 7⁄8", borne in clusters, slightly curved, flat, medium green. 3 beans per pod.
 Vine: 8', vigorous and prolific. Similar to SIEVA, productive over long period and high temperature.
 Seed: Small, round and plump in edible stage. Small and rounded, buff splashed with maroon in dry stage.

GIANT BUTTER SPECKLED 85-90 days
 Pods: 4-4½ x 1-1⁄8", almost straight, flat. Medium to dark green.
 Vine: 10', vine more vigorous than FLORIDA BUTTER.
 Seed: Large and flat in edible stage. Greenish white with maroon splashes, large oval, flat in dry stage.

- KING OF THE GARDEN** 87-93 days
 Pods: 6-7 x $1\frac{1}{8}$ - $1\frac{1}{4}$ ", flat, curved, medium light green. Most popular pole lima; also adaptable to freezing.
 Vines: 8-10', vigorous climber, dull medium green, heavily productive over moderate season.
 Seed: Large, nearly semi-circular, fairly plump, pale green in edible stage; same but flat to thick flat and green tinged dull white in seed stage.
- SIEVA (CAROLINA, SEEWEE, SMALL WHITE)** 85-89 days
 Pods: 3- $3\frac{1}{2}$ x $\frac{5}{8}$ - $\frac{3}{4}$ ", straight to curved at tip, flat to thick flat, medium green, smooth.
 Vines: 9-12', vigorous climber, early, moderately productive, very dark glossy green.
 Seed: Small, flattened oval tending to triangular, dull to chalky white in seed stage.
- WILLOW LEAF** 88-92 days
 Pods: Very similar to SIEVA.
 Vines: Like SIEVA but foliage consists of narrow willowy leaflets making variety more drought and heat tolerant in the South.
 Seed: Like SIEVA.



MESSRS. GEORGE W. SKIRM, PLANT BREEDER, AND HAROLD F. WOODRUFF, PRESIDENT, SELECTING PERFECTED DETROIT BEETS FOR STOCK SEED AT MILFORD.

B E E T

Beta vulgaris

ASGROW WONDER ALL-AMERICA SELECTIONS Gold Medal 1934 . . . 50-52 days

Roots: $2\frac{1}{2}$ -3" in diameter, short top shape, with medium tap root, dark red, fairly smooth skin; interior very dark red with occasional traces of faint zoning. Choice market type.

Tops: 12-14", with glossy medium green, medium broad leaf blade; medium collar.

CROSBY EGYPTIAN 50-52 days

Roots: Similar to **EARLY WONDER**, with higher percentage of roots flat globe and squarer shoulder. Lighter internal color than **EARLY WONDER** and more distinct zones.

Tops: Similar to **EARLY WONDER**, but medium collar. This variety becoming obsolete because of less desirable interior color.

DETROIT DARK RED (TALL TOP STRAIN) 55-58 days

Roots: $2\frac{1}{2}$ -3" in diameter, globe shaped symmetrical, slightly flattened on top, medium sized tap root, dark red, smooth skin; interior very dark red with faint indistinct zones; tender fleshed, giving excellent quality as diced or small whole beets. Also suitable for freezing when young.

Tops: 18-22", with glossy dark green, medium wide leaf blades which remain smooth; small to medium collar.

Adapted to mechanical harvesting. Widely used in East as a market garden beet because of attractive tops and smooth skin.

DETROIT SHORT TOP 57-60 days

Roots: $2\frac{1}{2}$ -3" in diameter, distinctly globe shaped, with small tap root, dark red skin; corky on top, interior very dark or blackish red with faint, indistinct broken zones of dark carmine red, brittle flesh. Most desirable for whole pack or freezing.

Tops: 12-15", with glossy dark green, narrow leaf blades which are slightly crumpled; small collar. A very uniform line.

Used by southern growers as a shipping variety to avoid freight on large tops.

EARLY BLOOD TURNIP 60-65 days

Roots: $2\frac{1}{2}$ -3" in diameter, fairly uniform top shape, medium tap root, medium dark red smooth skin; interior medium dark red with thin distinct zoning, brittle flesh. Home garden and local market strain.

Tops: Similar to **EARLY WONDER**, mostly green leaved; medium to small collar.

EARLY WONDER (GREEN LEAF) 49-52 days

Roots: $2\frac{1}{2}$ -3" in diameter, flat globe to short top shape with small tap root, dark red, smooth skin; interior dark red with thin distinct zones of magenta tinged medium red, very tender and rapid growing. Suitable for diced packs in northern latitudes.

Tops: 14-16", with glossy, medium green, broad, short, triangular shape leaf blade which remains smooth; small collar. Leaves remain green in fall when frost reddens other varieties.

EXTRA EARLY DARK RED EGYPTIAN (FLAT EGYPTIAN) . . . 49-51 days

Roots: $2\frac{1}{2}$ -3", flat to flat globe with very small tap root, very dark skin and dark red interior, occasionally faintly zoned. Earliest market type where diameter of bulb is prime consideration rather than total tonnage. Used extensively for transplanting to force for early market.

Tops: 14-16" medium large blades tinged with dark red, medium to small collar.

GREEN TOP BUNCHING . . . 58 days

Roots: $2\frac{1}{2}$ -3", round, smooth, refined, medium dark skin. Flesh is bright blood red with low fiber content.

Tops: 15-19", medium, erect, clean grayish green. A very saleable beet, with foliage that remains green in cool weather.

LONG SMOOTH BLOOD (LONG DARK BLOOD) . . . 75-80 days

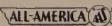
Roots: 2- $2\frac{1}{2}$ x 8-10", long cylindrical with abruptly tapered tip, medium to large tap root, smooth purplish red skin and deep purplish red interior with only slight traces of zoning; growth is partially out of ground. Important as late winter storage type.

Tops: 18-22", medium green to bronze, large broad leaf blades; medium to large collars.

LUTZ GREEN LEAF (WINTER KEEPER) . . . 70 days

Roots: $2\frac{1}{4}$ -3" in diameter, long top shaped, large tap root, very dark purplish red, smooth skin; very dark interior with distinct incomplete pale zones.

Tops: 14-18", large elongated, glossy green leaves, with pale pink midribs that remain free from frost discoloration. Excellent quality but only adapted to home garden.

PERFECTED DETROIT  Silver Medal 1934 . . 53-57 days

Roots: $2\frac{1}{4}$ -3" in diameter, almost globular at dicing stage developing from elongate globe at early market stage; medium to large tap roots; vigorous, rapid grower; dark blood red, fairly smooth skin with blood red interior occasionally showing faint indistinct zones. Small collar, uniform size. Used mainly as a market garden strain but also suitable for canning.

Tops: 16-19", large, broad oval leaf blades, partially crumpled, dark glossy green; becoming tinged red in fall; mostly medium collars.

SMALL CROWN DETROIT . . . 53-55 days

Roots: $2\frac{1}{4}$ - $2\frac{1}{2}$ " in diameter. Globular to slightly prolate at dicing stage, but distinctly prolate when younger; small tap root and very small crown and collar. Interior indistinctly zoned at canning stage with a corky skin. Interior color very dark bluish-red with no tinge of orange around bundles.

Tops: 16-18" medium large oval blade, partially crumpled; green with faint red tinge to leaves. Very small collar and crown. Foliage held erect and crop easily pulled mechanically.

This stock is primarily a canner strain, maintained in our Eastern Breeding Grounds because environment in East enables us to select desired thermostable color. Canner waste from this variety is at least 15% less than that from other strains of Detroit beet.

SWISS CHARD

Beta vulgaris var. *cicla*

BROAD RIB GREEN (WHITE SILVER RIBBED) 53-58 days

Plants: 14-20" tall, erect, vigorous, compactly bunched.

Leaves: Noted for prominent broad and thick, green tinted, white midrib; leaf blade 6-8" broad, 6-8" long, bright green, slightly crumpled.

FORDHOOK GIANT 55-60 days

Plants: 16-24" tall, hardy, vigorous, prolific and compactly bunched.

Leaves: Lucullus type, but petioles are broader and thicker on average and are more creamy tinged white than green tinted white; leaf blades 9-10" long, glossy dark blue green, much crumpled, with rounded incurved tip similar to LONG STANDING BLOOMSDALE SPINACH.

LUCULLUS 50-55 days

Plants: 16-22" tall, hardy, vigorous, compactly bunched.

Leaves: Leaf blade 5-7" broad, 9-12" long, medium apple green, heavily crumpled, petiole is creamy yellow and slender.

BROCCOLI

GREEN SPROUTING

Brassica oleracea var. *italica*

† **CALABRESE (ITALIAN GREEN SPROUTING)** 60-70 days

Heads: 2½-4" in diameter, formed of bright green compact buds, free from leaflets; sprouts developing after main head is cut are ¾-1½" in diameter and of similar type as main head. Distinctive flavor, tender; used for canning, freezing and market.

Plant: 24-30" tall, very leafy, blue green foliage, making erect, bushy plant.

DI CICCIO 55-60 days

Heads: Center heat 3 inches, good green; side heads ¾ inch and as compact as main head.

Plants: Medium tall, 2 ft., bright green and very productive. Especially desirable for quick freezing, the center head being cut early to stimulate the production of larger and more uniform side heads.

PROPAGENO EARLY 60 days

Heads: 2" diameter, compact, good bright green, free from leaflets. Normally does not develop marketable side shoots. Particularly valuable for early market garden to compete with southern market shippers.

Plants: 15-18" tall, moderately leafy, and moderately productive.

† FREEZING VARIETY

WALTHAM 11 50-55 days
 Heads: Center head 1½-3" in diameter; side heads 1" in diameter and relatively few in number. Medium green compact curd without flag leaves.
 Plants: 24" tall, slightly cupped leaves with little bloom, faintly yellowish-green in color. Erect, compact, uniform in maturity.
 Principally adapted for spring planting in New England.

† **WALTHAM 29** 60-70 days
 Heads: Center curd 2-4" in diameter consisting of closely adressed sprouts. Side sprouts 1-1½" in diameter, develop uniformly and are dark green in color.
 Well adapted to fall planting and apparently has some cold tolerance to minimize freezing damages.

TEXAS 107
 Heads: 6-7" in diameter fine curded, dark green, free of purple coloration and leaflets in head. Side shoots 1½-2" equal in quality to the main head. Plants: 20" tall, bluish green, compact and erect in habit. Many lateral buds develop into marketable shoots.
 In Texas this variety is superior in earliness, evenness of maturity, and head quality, and is notable for its heavy yield of side sprouts over a 6-7 week interval.

BROCCOLI - RAAB

Brassica Napus Cultigen

FALL

Winter annual making heavy compact top growth with 1" flower head early in spring for greens.
 Leaves are broad strapleaf turnip type. Grows 18-24" tall before going to seed.
 Used as early market greens.

SPRING

Same as FALL BROCCOLI-RAAB, but must be planted in spring, since it will not winter over. This is an annual and shoots to seed rapidly. Used also as early market greens.

BRUSSELS SPROUTS

Brassica oleracea var. gemmifera

† **LONG ISLAND IMPROVED** 92-97 days
 Plants: 22-26" tall, compact stem tightly packed with small heads 1½-1¾" in diameter.

† FREEZING VARIETY

CABBAGE

Brassica oleracea var. *capitata*



BADGER MARKET

ALL HEAD EARLY 77-80 days

Plants: Large, long, upright leaves, medium green, short to medium stem, rapid grower.

Heads: Flattened globe shape with rounded tops, 8-9" broad, weigh 6-7 lbs., interior creamy white, medium textured, hardy, medium core, good keeper for storage. Used for shipping and for kraut.

ALL HEAD EARLY SELECT (YELLOW RESISTANT) 77-80 days

Plants: Similar to ALL HEAD EARLY, though a little darker color.

Heads: Flattened globe 9-10" broad, weigh 7-7½ lbs.

ALL SEASONS 92-95 days

Plants: Large, vigorous, hardy, medium green, medium length stem, drought tolerant.

Heads: Drumhead with rounded top and bottom, 10-11" broad, 7-8" deep, weigh 9-10 lbs., interior creamy white, very solid, fine to medium textured, small to medium core. Good storage and kraut cabbage.

- BADGER MARKET (YELLOW RESISTANT)** 60-63 days
 Plants: A smaller, refined version of Racine Market. Medium sized, upright, dark blue-green leaves do not surround head; short-stemmed, compact plant will tolerate close plantings.
 Head: 4½-5", round, unusually compact, with medium core; interior greenish-white, fine grained, tightly packed; not subject to premature bursting.
 A truly yellows resistant, second-early market variety, produced by the Wisconsin Agricultural Experiment Station. Badger Market has excellent solidity and desirably small-sized head that does not burst prematurely. The variety is highly suited to present demands of the retail fresh vegetable market, and will tolerate close planting for high economic yields. Badger Market has proven satisfactory as a winter-grown shipping variety from South Florida and is very desirable in northern areas that are infested with Fusarium Yellows.
- BONANZA** 75 days
 Plants: Large, broad, open, dark green leaves with large prominent veins. Almost smooth surface with non-waved margins, head well protected by foliage.
 Head: Marketable at various sizes with a maximum of about 6"; broad, globular, medium texture, moderately solid, and small cored.
 Desirable market type because of long standing ability.
- BUGNER (HOUSER) (YELLOW RESISTANT)** 105-110 days
 Plants: Very large, with large upright leaves, color deep blue green which becomes red tinged in late fall, heavy bloom.
 Heads: Large, 7½-8½", globe to slightly flattened globe, weigh 7½-9 lbs., compact, hard with interior creamy white to pale yellow, coarser grained than DANISH BALLHEAD, with medium core. Has secondary or partial resistance to Yellows.
- CHARLESTON WAKEFIELD** 71-75 days
 Plants: Large, long, semi-erect outer leaves, dark green, medium stem.
 Heads: 6-7" broad at base, 7-8½" deep, weigh 4-5 lbs. pyriform with rounded point; interior greenish white, medium textured, fairly firm, small to medium core. Used for Southern winter shipping; good for home garden and local markets as well.
- COPENHAGEN MARKET** 65-70 days
 Plants: Medium sized, saucer shaped, short, upright leaves standing away from head, medium grayed green, short stem, rapid early grower; characterized by prominence of heads in field when seen from distance.
 Heads: 6-7" in diameter, weigh 3-3½ lbs., interior white, fine grained, tender, tightly packed, not susceptible to premature bursting; small medium core.
- DANISH BALL HEAD (HOLLANDER)** 105-110 days
 Plants: Medium to large size, short stem, upright leaves, color blue green with heavy silvery gray bloom.
 Heads: Globe to flattened globe, very hard, 7½-8½" in diameter, weigh 6-6½ lbs., interior white, fine grained, tightly packed, with small to medium core. Leading late variety for processing.

DETROIT (YELLOW RESISTANT GOLDEN ACRE) 63-66 days
Plants: A resistant type of GOLDEN ACRE, with slightly larger plant. Plant habit slightly different from GOLDEN ACRE. Coarser, more open leaves.
Heads: 6" in diameter. Very similar to GOLDEN ACRE or COPENHAGEN MARKET, with creamy white interior.

DRUMHEAD SAVOY 90-95 days
Plants: Large, broad, semi-erect leaves, dark green, coarsely savoyed, medium stem.
Heads: 8" broad, 6½-7" deep, weigh 5-6 lbs., almost round; interior yellow to greenish yellow, medium textured, fairly firm, medium core.

EXTRA EARLY COPENHAGEN MARKET 63-66 days
Plants: Similar to COPENHAGEN MARKET
Heads: 6-6½", weigh 2½-3 lbs., interior white, tender, tightly packed, small medium core, not susceptible to premature bursting.
Adapted to South particularly, does well anywhere. This is an exceptional variety of very fine quality. This line has been carefully selected for uniformly early maturity.

FERRY'S ROUND DUTCH 75-80 days
Plants: Small, compact, short stem, ascending leaves, medium green foliage.
Heads: Round, slightly flattened at base, 7-8", weigh 4½-5 lbs., green.
Selected out of Early Dwarf Flat Dutch. Slow to produce seeders. A leading shipping and market variety in South and Southeast.
Well adapted in North for close planting.

GLOBE (YELLOW RESISTANT) 79-83 days
Plants: Large, spreading, vigorous, medium green, moderate bloom. This is yellow resistant selection of GLORY.
Heads: Large, flattened globe, 8-9" diameter, weigh 5½-6 lbs., hard; interior creamy white with medium grain and medium sized core. It is used extensively for fall planted kraut.

GLORY OF ENKHUIZEN 78-82 days
Plants: Large spreading leaves slightly curved upward, color medium blue tinged green with moderate bloom.
Heads: Large, globe, 6½-8" in diameter, weigh 5-6 lbs., hard; interior creamy white, medium grained, medium core. Desirable variety of early midseason maturity, for shipping and kraut.

GOLDEN ACRE 63-66 days
Plants: Similar to COPENHAGEN MARKET, being an extra early selection from that variety.
Heads: 6-6½" in diameter, weigh 2½-3 lbs., otherwise same as COPENHAGEN MARKET.



GOLDEN ACRE ELITE

GOLDEN ACRE ELITE 60-63 days

Plants: Very uniform, closely selected strain of GOLDEN ACRE with short stem, uniform type and maturity.

Heads: 6-6½" in diameter, weigh 3-3¼ lbs., very uniform, golden green, globular.

GREEN ACRE 68-70 days

Plants: Same as GOLDEN ACRE, but darker green and larger leaved so that heads are not as noticeable in the field.

Heads: Same as GOLDEN ACRE, but darker green exterior and greenish white interior. Holds color better for shipping and market.

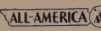
IMPROVED WISCONSIN ALL SEASONS (YELLOW AND MOSAIC RESISTANT)

92-95 days

Plants: Yellows resistant selection from ALL SEASONS; similar to ALL SEASONS, but not as uniform.

Heads: 11" in diameter. Similar to ALL SEASONS, but with coarser interior texture. Very valuable as a substitute for regular ALL SEASONS in an infested location.

Used chiefly for kraut and winter storage.

- JERSEY QUEEN (YELLOWS RESISTANT)** 65-68 days
 Plants: Selected from JERSEY WAKEFIELD for disease resistance; very similar in type but dark blue green.
 Heads: Pointed similar to JERSEY WAKEFIELD though smaller, more compact and finer texture. $4\frac{1}{2}$ - $5\frac{1}{2}$ " in diameter.
- JERSEY WAKEFIELD** 60-62 days
 Plants: Small, medium broad, upright leaves, compact, medium blue green, short stem. Extra early market or home garden type.
 Heads: $4\frac{1}{2}$ - $5\frac{1}{2}$ " broad at base, $6\frac{1}{2}$ -7" deep, weigh 2- $2\frac{1}{2}$ lbs., pyriform, more pointed than CHARLESTON WAKEFIELD; interior greenish white, fairly solid, medium textured, small core.
- MAMMOTH RED ROCK** 100-105 days
 Plants: Large, broad, semi-spreading leaves, deep blood red or purplish red, globular to flat globe, medium stem, heavy producer.
 Heads: 7-8" broad, $6\frac{1}{2}$ -7" deep, weigh 6-7 lbs., interior red, fairly solid, coarse textured, medium core, good keeper.
- MARION MARKET (YELLOWS RESISTANT COPENHAGEN MARKET)** 75-78 days
 Plants: Medium size, with larger leaves and more spreading plant habit than COPENHAGEN MARKET, deeper blue green than COPENHAGEN MARKET.
 Heads: Globe, $6\frac{1}{2}$ - $7\frac{1}{2}$ " in diameter, weigh 4-5 lbs., hard; fine grained, creamy white interior, tender and crisp fleshed, medium core. Usually not as uniform as good strains of COPENHAGEN MARKET.
 This variety is the most widely adapted of all strains of yellows resistant types. It is used for the green market and as a second early kraut variety.
- MIDSEASON MARKET** 73-78 days
 Plants: Upright, fast growing, stout, short stem, thick smooth leaves, medium light bluish green, seemingly covered with silvery grayish bloom.
 Heads: Large, hard, round, 6-8", weigh 3-4 lbs., excellent quality. Very similar to GLORY OF ENKHUIZEN.
- PENN STATE BALLHEAD**  Silver Medal 1934 103-107 days
 Plants: Medium size, medium large leaves, upright, blue green with moderate bloom.
 Heads: Flattened globe, 7-8" in diameter, 6-7" deep, weigh 5-6 lbs., very hard, creamy white interior, fine grained, small to medium core, very uniform strain.
- PREMIUM LATE FLAT DUTCH (LATE DRUMHEAD)** 100-110 days
 Plants: Large, broad, spreading leaves, medium blue green, medium stem. Heavy yielding market and kraut type.
 Heads: 11-14" broad, $6\frac{1}{2}$ - $7\frac{1}{2}$ " deep, weigh 12-15 lbs., distinctly flat; interior creamy white, very solid, medium textured, small to medium core.
- RACINE MARKET (YELLOWS RESISTANT)** 68-70 days
 Plants: Similar to COPENHAGEN MARKET, dependable, early and uniform.
 Heads: $6\frac{1}{2}$ -7" round, with slight tendency to become pointed; solid, a steel gray green color to leaves. A good quality, excellent early shipper, or used as early kraut.

- RED ACRE** 75-78 days
Plants: Type of **GOLDEN ACRE** but more leafy and medium red with moderate bloom.
Heads: Same as **GOLDEN ACRE**, but red.
- RED HOLLANDER (YELLOW RESISTANT)** 100-105 days
Similar to **WISCONSIN HOLLANDER** except for color. Excellent for main crop.
Globular heads 6" diameter are used for shipping and storage.
- SENECA DANISH BALLHEAD** 95-100 days
Plants: Medium sized, short stem; ascending foliage with better bloom.
Plants vigorous and uniform.
Heads: 6-6½" oblate, very hard, uniform. Clear green outside creamy within head, small core and fine texture.
A small framed, smaller head Danish type primarily for the green market or shipper.
- SPECIAL LONG ISLAND SAVOY** 95-100 days
Plants: Our own strain of late Savoy type. Large, leaves broad spreading, dark green, medium savoyed over entire surface, short to medium stem.
Heads: 8-10" broad, 7-8" deep, weigh 6-7 lbs., flat globe shape with slightly rounded tops; interior yellow to greenish yellow, very solid, fine textured, small to medium core. Very resistant to late frosts and an excellent market garden variety if consumer will accept a savoy cabbage.
- SPECIAL RED ROCK** 98-103 days
Plants: Selected from **MAMMOTH RED ROCK** for vigor and uniformity, short stem.
Heads: 7-8" broad, 7-8" deep, weigh 7-8½ lbs., globular to slightly ovate, deep blood red carried through head, medium textured, solid, small to medium core.
- STEIN'S EARLY FLAT DUTCH** 90-95 days
Plants: Medium sized, broad, semi-erect, compact, leaves medium gray green, short to medium stem, vigorous.
Heads: 10-11" broad, 6-6½" deep, weigh 9-10 lbs., flat globe shape, solid; interior creamy white, medium textured, medium core.
Very satisfactory market and home garden type.
- SUCCESSION** 92-95 days
Plants: Medium sized, broad, semi-erect leaves, medium blue green, medium stem.
Heads: Globular to flattened globe, 10-11" broad, 7-8" deep, weigh 8-9 lbs., solid, medium textured; interior white, good quality, medium core.
Good late summer and fall strain; good keeper.
- WISCONSIN HOLLANDER NO. 8 (YELLOW RESISTANT)** . . . 108-112 days
Plants: Medium to large, upright leaves, blue green, moderately heavy bloom. Yellow resistant selection from **DANISH BALLHEAD**.
Heads: Globular to flattened globe, 7½-8½" diameter, weigh 6-8 lbs., similar to **DANISH BALLHEAD**, but not as uniform size as best strains of **DANISH BALLHEAD**.

CABBAGE, CHINESE

Brassica pekinensis

CHIH LI (PEKIN IMPROVED) 70-75 days

Heads: $3\frac{1}{2}$ -4 x 16-20", long cylindrical, pointed at tip, very solid and crisp, pale yellow to creamy white interior with outer leaves medium yellow green to apple green; erect growth. Probably best of varieties grown in this country.

MICHI LI 70-75 days

Plants: Exceptionally sure heading, vigorous, similar to CHIH LI.

Heads: 4 x 18-20", long cylindrical, firm, crisp, dark green outer leaves without a yellowish cast, fine flavor.

WONG BOK (PAO-TING) 75-80 days

Heads: 5-7 x 8-10", long oval, fairly firm, creamy white to pale yellow interior, with dark blue green outer leaves; plant semi-erect with tips of outer leaves curling outwards.

CANTALOUPE AND MUSKMELON

Cucumis melo

PINK OR ORANGE FLESHED VARIETIES

BANANA 95-100 days

Fruits: $3\frac{1}{2}$ -5 x 10-20", weigh $4\frac{1}{2}$ -6 lbs., banana shaped, long, tapered slightly at both ends, skin is smooth, yellow when ripe with fairly thick pink flesh, well flavored. Used as late maturing variety in the South where it is not susceptible to sun scald.

BENDER'S SURPRISE 90-94 days

Fruits: 5-6 x 7-9", weigh 6-8 lbs., thick oval shape, distinctly ribbed, coarsely netted, skin dark green becoming light yellow at maturity, flesh bright salmon pink, thick, firm. Popular local shipping melon in the North-east. Has thicker flesh than TIP TOP.

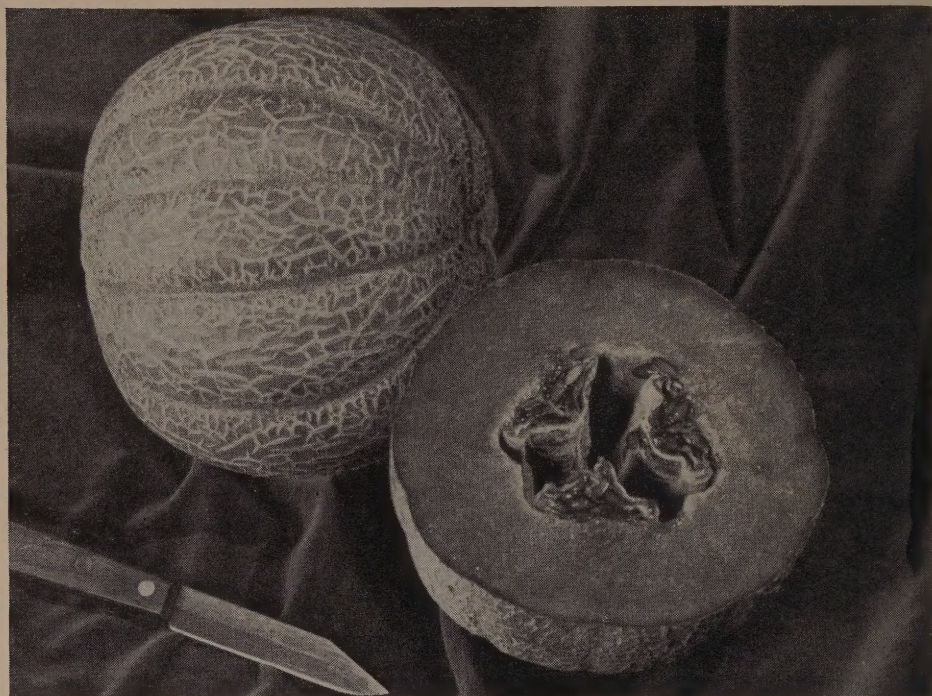
BURRELL'S GEM (DEFENDER, ORDWAY PINK MEAT) 90-95 days

Fruits: $4\frac{1}{2}$ x $6\frac{1}{2}$ ", weigh $2\frac{1}{2}$ -3 lbs., oval to oblong shape, distinctly ribbed, with medium netting, skin dark green remaining green at maturity, flesh rich orange, thick, sweet and spicy. Hardy variety in dry weather, but frequently develops blossom cracks in wet weather.

CRENSHAW 95-100 days

Fruits: Large, 6 x 7", acorn shape, tapered at stem end. Skin smooth but surface slightly roughened (ridged) and yellow when ripe; flesh is thick, buff pink, excellent quality. Preferred for local use on the Pacific Coast.

DELICIOUS (EARLY BENDER) 83-87 days
 Fruits: Similar to BENDER'S SURPRISE but earlier and smaller fruited on average; flavor and quality is better than BENDER'S SURPRISE: 5-6 x 6-7", weigh 5-6½ lbs., skin creamy green at maturity. An outstanding variety apparently well adapted to North East, not a shipping type.

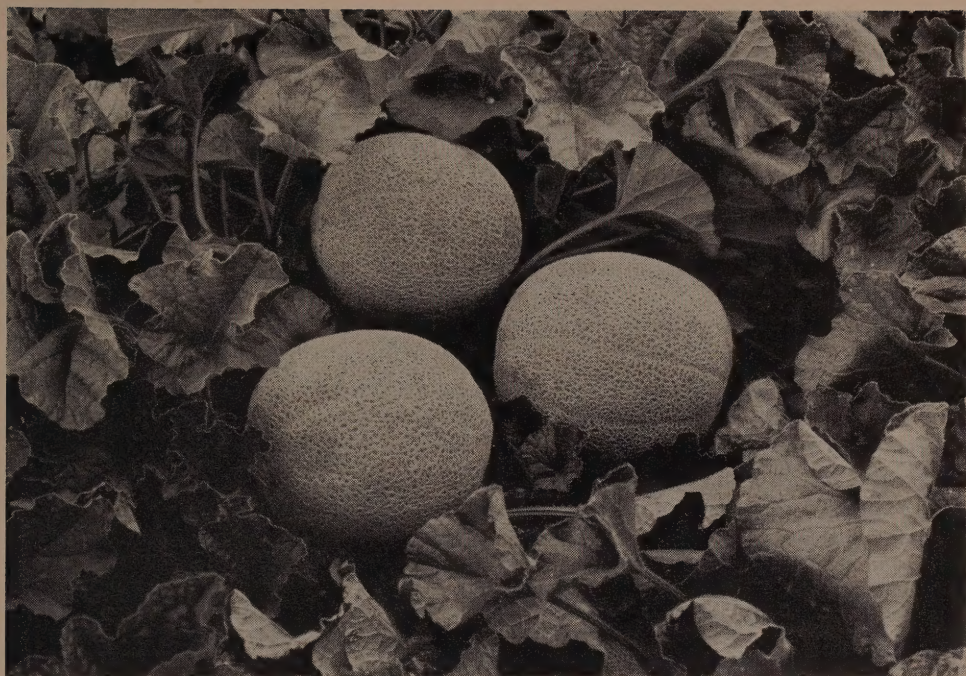


DELICIOUS 51

DELICIOUS 51, FUSARIUM RESISTANT 85 days
 Fruits: Similar externally to Delicious; 5½ to 6½ x 7", weigh 6½ pounds. Almost round to slightly oval, moderately ribbed with heavy open coarse net; skin light yellow at maturity. Bright orange flesh, very thick, excellent fine texture, aromatic, sweet and flavorful.
 Delicious 51, bred by Dr. H. M. Munger, is resistant to fusarium wilt. This very fine early maturing Delicious type melon is a very high quality, disease resistant local market garden variety. It is a very productive and early maturing variety even when grown on infected soil.

EMERALD GEM 80-85 days
 Fruits: 5-6 x 4-5", weigh 2½-3 lbs., flattened globe shape, distinctly ribbed with trace of netting, skin is bright emerald green becoming yellow green at maturity; flesh very thick, intense salmon orange, excellent quality. Suitable only for home garden and local market.

GOLDEN DELIGHT. ALL-AMERICA SELECTIONS Bronze Medal 1952 . . 85-90 days
 Fruits: 6½ x 7½", weight 4½-5 lbs. Large broad oval fruit with shallow but distinct ribs. Sparse, very coarse netting over a grey-green skin. Flesh thick and fine grained; bright golden orange, with musky sweet flavor and an excellent aroma. Not adapted for shipping but excellent quality fruits for home garden and local market. This variety produces desirable fruit under very adverse conditions when most other varieties fail.



HALE'S BEST NO. 36

HALE'S BEST NO. 36 82-86 days

Fruits: 5-5½ x 6-6½", weigh 3-4 lbs., thick, rounded oval, inconspicuously ribbed with heavy interlaced netting; skin yellow green with flesh salmon-orange, very thick and solid, good quality. One of the most widely used varieties for long distance shipping, local market or home garden.

HALE'S BEST NO. 936 88 days

Fruits: Uniform, nearly round, heavy netting which makes it a good shipper. Flesh is firm, sweet, and salmon in color. Developed from HALE'S BEST NO. 36 for larger fruit size.

HALE'S BEST, JUMBO STRAIN (TRIUMPH) 84-88 days

Fruits: 6-7 x 7-8", weigh 5-6 lbs., similar to HALE'S BEST NO. 36 but larger and slightly later strain.

HALE'S BEST, SPECIAL SELECT 88 days

Fruits: 5-5½ x 6", weighing 3½-4½ lbs. Short oval in shape, well netted, indistinctly ribbed on a light green skin. Salmon flesh is thick, good textured but very firm, sweet but not aromatic, enclosing a small seed cavity. This variety can be picked at "full slip" for maximum quality, held locally for a long time without heavy losses, or shipped to distant markets.

HEARTS OF GOLD, MORRILL'S LARGE STRAIN 93-97 days

Fruits: 6½-7" in diameter, weight 4-5½ lbs., globular, distinctly ribbed with abundant fine grey netting. Skin dark green, flesh very thick, deep salmon-orange, firm, sweet and juicy. Used for local markets and medium distant markets.

IROQUOIS (CORNELL NO. 36B) *Fusarium Resistant* 88 days
 Fruits: 7 x 6", light grayish green skin, prominently ribbed with fairly heavy netting. Flesh is thick with deep orange color and sweet, tough rind. This was developed by Henry Munger at Cornell University and is a fusarium wilt resistant BENDER type melon.

MILWAUKEE MARKET 85-90 days
 Fruits: 6-7 x 7-8", weigh 4½-6 lbs., oval, prominent ribbing with moderately abundant coarse netting; skin bright gray green; flesh deep salmon, solid, thick, medium textured, good flavor. Early shipping type for Northern areas.

MARGOLD 86 days
 Fruits: 6-6½" x 5-5½" slightly elongate globe, weigh 3-3¼ pounds. Well netted over broad indistinct ribs. Skin pale with very pale netting to produce an attractive appearance. Flesh moderately thick, light salmon color at slip but becoming medium orange when fully ripe; texture a little coarse. Rind thin but adequately strong. Seeds well webbed but variety must be handled carefully for distant marketing.

OSAGE (MILLER'S CREAM, EXTRA EARLY OSAGE) 90-95 days
 Fruits: 6-6½ x 7-8", weigh 5-6 lbs., rounded oval shape, slightly ribbed with sparse, patchy, coarse netting; skin dark green; flesh orange, thick, distinct sweet spicy flavor, fairly good quality. Home garden and local market type.

POWDERY MILDEW RESISTANT NO. 45 (HALE'S BEST NO. 45, IMPERIAL NO. 45) 85-90 days
 Fruits: 5-5½ x 6-6½", weigh 3-4 lbs., similar in type and use to HALE'S BEST, but is resistant to powdery mildew, flesh thick, salmon colored flesh, firm, sweet. Can be shipped in more mature stage than HALE'S BEST. Preferred over HALE'S BEST in area where powdery mildew is prevalent. Can be picked at full slip for long distance shipping. In areas of extreme mildew use NO. 5.

POWDERY MILDEW RESISTANT NO. 5 (IMPERIAL NO. 5) 90-95 days
 Fruits: Slightly ribbed, inconspicuously netted, good flavored, salmon colored flesh. Pick early slip for distant shipping. Promising shipping type, extremely resistant to mildew.

POWDERY MILDEW RESISTANT NO. 6 (IMPERIAL NO. 6) 90 days
 Fruits: 6 x 5½" weighing 4 lbs. slightly elongated to round in cross section, well netted, and slightly ribbed. Fruit has firm, good quality. Pale salmon flesh and small seed cavity. The variety is resistant to both strains of mildew in California, holds up well for long distance shipping and ripens more uniformly than Imperial No. 5.

PRIDE OF WISCONSIN (QUEEN OF COLORADO, JERSEY GOLD) 90-95 days
 Fruits: 6-6½ x 6½-7½", weigh 3½-4½ lbs., thick, pointed oval, shallow but distinct ribbing with moderately sparse, very coarse netting; skin gray green, hard and tough; flesh orange, solid, thick, very sweet, good flavored. Has become well known in Eastern markets because of excellent flavor and market quality.

SCHOON'S HARD SHELL 90-95 days
Fruits: 6-7 x 7-8", weigh 5-7 lbs., thick oval with heavy blossom scar which resists cracking, prominent ribbing with abundant coarse netting, skin gray green becoming yellow at maturity, very hard and tough, flesh very thick, deep salmon-orange, solid, well flavored, excellent quality. Superlative shipping and market melon in BENDER group. This variety remains in palatable condition for longer time than other standard varieties.

SENECA BENDER 92-94 days
Fruits: 4¾-5½ x 6½-7½", weighing 5-6 lbs. Broad oval shape, coarsely netted and distinctly ribbed. Skin dark green, blanching to dull yellow at maturity. Flesh medium thick, salmon-orange, and sweet. Firm rind. A selection from BENDER'S SURPRISE, showing typical BENDER netting, ribbing and large blossom end scar. Satisfactory for nearby markets and home garden. Vigorous and productive.

SUGAR ROCK (HONEY ROCK)  Gold Medal 1933 82-87 days
Fruits: 5-6 x 5½-6½", weigh 3-4 lbs., globular to slightly oval, faint ribbing with abundant coarse netting; skin gray green becoming pale yellow at maturity, tough and hard; flesh deep salmon, medium thick, fairly solid, juicy, good quality. Very desirable home garden and local market type; not suitable for long distance shipping. Ripens between DELICIOUS and BENDER'S.

S R NO. 91 (SULPHUR RESISTANT) 85 days
Fruit: 5¾ x 6¼" weighing 4½ to 5½ lbs., broad oval with close broad high net and tough rind. Flesh very thick, high quality, salmon-orange. Seed cavity very small. A quality melon well adapted to the Pacific coast growing areas and equally adapted for shipping to Eastern markets. Appears to be resistant to some strains of mosaic and very resistant to sulphur damage, thus sulphur can be applied to control powdery mildew.

TEXAS RESISTANT NO. 1 82-86 days
Fruits: 5½ x 4¾". Oval, moderately netted, moderately thick, good salmon color, with firm texture. Flavor sweet and unique.
Resistance: Not entirely resistant to downy mildew; almost entirely resistant to aphids. The vines show considerable resistance to melon worms. Result of breeding work in Texas at Winter Haven Station.

V-1 85 days
Fruits: Medium size, slightly oval, similar to POWDERY MILDEW RESISTANT no. 45, except netting is a little rougher. Flesh is thick, salmon color, very sweet, small seed cavity. Particularly adapted for use on the Pacific Coast. Developed in Texas and carries no resistance to mildew, but is very tolerant of sulphur dusting, thus the grower can produce a clean crop without too much damage to vine.

GREEN FLESHED VARIETIES

EXTRA EARLY HACKENSACK 80-85 days

Fruits: 6-7 x 5-6", weigh 3-3½ lbs., large, flattened globe shape, prominently ribbed with abundant interlaced netting; skin yellow mottled with green; flesh light green, juicy and good flavor. Home garden and local market type.

HONEY DEW, GREEN FLESHED (ANTIBES) 112-115 days

Fruits: 6-7½ x 7-8", weigh 5-6 lbs., globular to thick oval; skin smooth, hard creamy white to creamy yellow, occasional traces of netting; flesh very thick, pale emerald green, sweet, juicy, distinctly flavored. Good storage and shipping melon. Not adapted in the cooler shorter growing season of North and East.

LARGE HACKENSACK (TURK'S CAP) 85-90 days

Fruits: Similar to EXTRA EARLY HACKENSACK, but later and larger fruited, being 7-8 x 5½-6" and weighing 5-6 lbs.

OHIO SUGAR (GREEN FLESHED TIP TOP) 90-95 days

Fruits: Similar type to TIP TOP, but green fleshed; very large 7-8 x 8-9", weigh 6-8 lbs., thick oval to nearly globe shape, prominently ribbed with sparse netting; skin creamy yellow; flesh light green, fine textured, soft, juicy, sweet, good quality and flavor. Home garden and local market type.

ROCKY FORD (NETTED GEM, EDEN GEM, NUTMEG) 87-92 days

Fruits: 4-5 x 4½-5½", weigh 1½-2 lbs., nearly globular, very shallow ribbing with abundant finely interlaced netting; skin dark green becoming mottled bronze; flesh green with narrow golden border at seed cavity, medium thick, fairly firm, very sweet, flavorful and juicy. Widely cultivated local market and shipper type.

C A R R O T

Daucus Carota var. *sativa*

DANVERETTE 75 days

Tops: Identical with Danvers Half Long.

Roots: 7-7½" long by 1½" wide at shoulder. Free of pigmentation in the collar. Roots have a slim-taper and are slightly stump rooted to eliminate "rat-tails". A dark orange skin with a dark cortex and core. Danverette has an improved internal color plus freedom from the occasional pale core of Danvers Half Long.

DANVERS HALF LONG 75 days

Tops: 14-17" tall, heavy foliage, large collar and very strong tops.

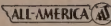
Roots: 7-7½ x 1¼-1½" square shoulder with an occasional sunken crown, long slim taper with slightly tapered tap root. Medium dark orange skin, orange cortex and light distinct core. This vigorous growing, heavy-yielding, brittle fleshed variety does well under most environmental conditions.

DANVERS LONG STRAIN 75 days
 Tops: Identical with DANVERS HALF LONG.
 Roots: 7-8 x 1½-1¾", square shouldered with fewer sunken crowns. Long, slim taper with abrupt taper to tap root, medium orange skin, orange cortex and orange indistinct core. This is a longer rooted, coreless strain of DANVERS HALF LONG.

GOLD SPIKE 75-80 days
 Tops: 12-14" tall; short dark green tops with strong petioles emerging from a small rounded collar.
 Roots: 9-10" long by 1¼" wide at the shoulder. Very smooth surface on a long slim tapered root that is uniformly free of "rat-tails". Roots have a dark reddish orange skin, dark orange cortex and a small dark orange core. The color develops rapidly in immature roots, hence this coreless refined variety is ideal for the shipper of bunched carrots.

† **GREATER CHANTENAY** 72 days
 Tops: 16-18" tall, medium dense foliage with medium wide collar and very strong top.
 Roots: 6-7 x 2-2½", rounded shoulder, almost cylindrical root, abruptly stump rooted. Dark orange skin, dark cortex and medium diameter core of same color. An improved CHANTENAY type characterized by smoother and longer roots with a very good core color. A dependable all-purpose variety.

HUTCHINSON 80-85 days
 Tops: 14-17" tall, dense heavy foliage, resistant to Cercospora Leaf Spot. Large collar and strong tops.
 Roots: 10-12 x 1½-1¾", square shoulder, long slim taper with long tap root. Medium to light orange skin, medium cortex and paler core. A coarser DANVERS type root that is very productive on rich land. Our strain, selected for smoothness and uniformity, is one of the best winter carrots.

IMPERATOR (REGULAR)  Silver Medal 1935 77 days
 Tops: 14-16" refined top, small collar and moderately strong top.
 Roots: 8-9 x 1¼-1½", rounded top, uniform and slightly tapering with abrupt tapering tip, dark orange skin, dark orange cortex and small dark orange core. A coreless, excellent colored, fine grained variety developed primarily for shipping trade.

IMPERATOR, LONG STRAIN 77 days
 Tops: 14-16". Same as regular IMPERATOR.
 Roots: 9-11 x 1¼-1½", similar to regular IMPERATOR. This variety possesses all the good characters of regular IMPERATOR, differing only in length of root. Variety developed for bunching and dehydrating by growers on the Pacific Coast.

† FREEZING VARIETY



LONG TYPE IMPERATOR

IMPERIDA 75-80 days

Tops: 10-12" long; similar in color to Imperator but at least 5" shorter.

The petioles are strong and adhere to the crown during bunching.

Roots: 8-9" long by 1 1/4" in diameter with square shoulders and level crowns. The slim tapered root has a very minute stump at the tip, a salmon-orange skin and an orange core and cortex. The core size is small, identical in color with the cortex. The tops are left on bunching carrots to maintain an attractive appearance and to indicate freshness of product. Adequate ice is required during shipping to retard wilting. A truly short topped variety like Imperida does not require excessive amounts of ice and the tops do not have to be sheared to make room for the ice.

IMPROVED LONG ORANGE (ST. VALERY) 85-88 days

Tops: 18-20" tall, dense foliage with medium to large collar and strong top.

Roots: 9-12 x 1 1/2-1 3/4", rounded shoulder with no sunken crowns; uniformly, slightly tapered through entire length. Dark orange skin, dark cortex, with distinct dark core. An old standard variety for winter storage and bunching; also used for stock feed.

MORSE'S BUNCHING ALL-AMERICA SELECTIONS Gold Medal 1934 . . . 77 days

Tops: 12-14", moderately dense foliage, medium to small collar, strong tops.

Roots: 7 1/2-8 1/2 x 1 1/4-1 1/2", rounded shoulder, uniformly, slightly tapering with a definite stump tip. Skin bright orange, cortex and small core are good orange. Variety desirable for freezing and very productive in the North.

† **NANTES STRONG TOP** 68 days
Tops: 12-14", moderately coarse foliage, small to medium collar and strong top.

Roots: 6-7 x 1-1¼", round on top, uniformly cylindrical with no taper, round at base. Bright orange skin and cortex with very small dark orange core. This variety very similar to NANTES HALF LONG, except line has been carefully selected for ease in harvesting. This variety is recommended for canners and freezers.

OXHEART (GUERANDE) 80-82 days
Tops: 14-16" tall, coarse dense foliage, with large collar and strong tops.

Roots: 3-4 x 2-2½", square shoulder, heart shape, stump rooted with small tap root. Medium dark skin, medium dark cortex, large pale yellow cores. Ideally adapted to heavy soils and easily harvested under all conditions.

† **RED CORED CHANTENAY** 70 days
Tops: 14-16", moderately coarse foliage, small collar and strong top.

Roots: 5-6 x 2-2½", roundish shoulders, slightly tapering, stump rooted with refined tap root. Excellent dark orange skin and cortex with dark core. Flesh tender and sweet with uniform color. A very desirable variety for critical market gardeners and also suitable for all types of processing.

SUPREME HALF LONG 80 days
Tops: 14-16" tall when grown on muck. Medium heavy foliage borne on a large shoulder which has a slightly indented crown.

Roots: 7-8" long by 1¼-1½" wide; uniformly tapering to a small blunt tip. The medium dark orange skin plus a moderate size indistinct core, almost as dark as the cortex, is an improvement over Danvers Half Long. A Danvers type of carrot, with an improved interior color, that does not produce excessive foliage when grown on muck. The long slender root and good interior color makes this variety acceptable for bunching.

TENDERSWEET 80 days
Tops: 14-16" tall, refined but strong foliage on a small collar. Petioles tinged with purple.

Roots: 7-8" long by 1¼" at the shoulder, long conic in shape with a long tip. Skin tinged with red where exposed to light, elsewhere a deep reddish orange. A very small dark orange core is indistinguishable from the dark orange cortex. Unexcelled for flavor, tenderness and color. A very desirable carrot for freezing because it retains its color when stored. The desired color develops under the most adverse conditions and roots can be harvested when quite immature. The market prejudice against pigmented foliage and red-skinned roots restricts the use of this fine variety to the home gardener and to the processor of sliced roots.

- † **TOUCHON** 70 days
 Tops: 12-14" very refined foliage, small collar, and medium strong tops.
 Roots: 6½-8 x 1-1¼", round on top, uniformly cylindrical with no taper to rounded base. Orange skin, cortex and core. Excellent quality roots similar to NANTES, but roots are slightly longer and not so difficult to harvest. Definitely recommended for all markets and processors.

CAULIFLOWER

Brassica oleracea var. *botrytis*

- † **EARLY SNOWBALL** 54-55 days
 Heads: 6-7" in diameter, weigh 1½-2 lbs., deep, compact, creamy white curd, free from leaflets, excellent quality and flavor; very dependable header; uniform strain. Recommended for canning and freezing.
 Plants: Dwarf, compact, upright leaves, pale blue green, shorter leaved than later varieties.
- † **SNOWDRIFT (WHITE MOUNTAIN)** 57-60 days
 Heads: 6½-7½" in diameter, weigh 1½-2 lbs., firm, compact, snowy white, fine textured, curd free from leaflets, good quality. Suitable for shipping and canning.
 Plants: Slightly larger than SNOWBALL, long, large, upright leaves, giving good coverage, medium green.

- SUPER SNOWBALL** 56-57 days
 Heads: 6½-7½" in diameter, weigh 1¾-2½ lbs., deep, solid and compact, uniform type free from leaflets or defects, snowy white, excellent quality. Very good main crop for canning, freezing and shipping.
 Plants: Dwarf type but larger spread and slightly taller than EARLY SNOWBALL; very uniform type; blue green, long and broad leaves which make good cover for bleaching.

CELERIAC

Apium graveolens var. *rapaceum*

Also called TURNIP ROOTED CELERY or KNOB CELERY

- GIANT SMOOTH PRAGUE** 110-120 days
 Roots globular; fairly smooth bulb 2½-4" in diameter, is the only edible portion, while hollow dark green stalks resembling loose celery are inedible; bulbs used for adding celery flavor to soups.
- WOODRUFF'S ACE** 115-120 days
 Our new and improved strain of celeriac, which produces more vigorous tops and bulbs and is relatively more disease resistant; bulbs of this strain weigh 3-6 lbs.

† FREEZING VARIETY

CELERY

Apium graveolens var. *dulce*

GREEN VARIETIES

EASY BLANCHING (SANFORD SUPERB) 110 days

Plants: 18-20" tall, upright, compact, and uniform. Outer leaves a medium dark green and inner leaves lighter green.

Stalk: 5-7" to first joint; broad and firm. Light green in color; easily blanched to a creamy white. Stalk has little fiber, is crisp, tender and of mild flavor.

Use: Early maturing, it is a good winter keeper and is suitable for home and market garden.

EMERSON PASCAL 110 days

Plants: 20-24" tall; dark green foliage, erect in habit. Stalks brittle, but easily harvested with reasonable amount of care. Foliage unique and fern-like but not objectionably different when trimmed for packaging. Small heart.

Stalk: 8-9" to the first joint. Rounded and large but has narrow slot. Petiole free of ribs and grooves. The very dark petioles have superb quality with frail strings and a sweet nutty flavor.

Developed at Cornell University and released as a high quality variety, possessing resistance to early and late blight.

EMPEROR (FORDHOOK) 125-130 days

Plants: 18-20" tall; dark green foliage and medium green stalk. Slightly spreading in habit but easily harvested.

Stalk: 6-7" to the first joint. Petiole very smooth and ribless, fully rounded with medium sized clasp. Excellent quality, thick and mild flavored. Tender stalks are readily blanched to pale greenish white with few stalks in the large golden heart.

Noted for its keeping qualities. Well adapted for home garden use, but not recommended for long distance shipping.

GIANT PASCAL 135-140 days

Plants: 24-30" tall. Dark green foliage throughout. Plant compact and slightly spreading. Pliable enough for easy harvest.

Stalk: 7" long to first joint. Petiole almost uniform throughout entire length with a very broad clasp. Outer stalks prominently ribbed, but inner stalks essentially smooth, rounded, thick, brittle, and of good quality. Large heart readily bleached to creamy white.

Uses: Essentially a winter variety. Strong flavored and fibrous until bleached, then crisp and tender with an aromatic sweet flavor.

SUMMER PASCAL 110-120 days

Plants: 18-22" tall, erect and compact, with ample, glistening, medium dark-green foliage. Stalk flexible enough for easy harvest.

Stalks: 7-9" long, medium thick rounded and smooth with a narrow clasp. Large number of stalks form a heavy, compact bunch with a long full heart. Outer stalks light green, inner stalks pale cream.

The most popular Pascal for the East and South.



TEN GRAND

TEN GRAND (UTAH TYPE) 130 days

Plant: 22-26" tall, uniform, compact, moderately brittle but can be harvested without excessive breakage. Medium green foliage.

Stalk: Crisp and dark green in color. 9" to first joint; medium width, brittle. Hearts are long with a good number of stalks. Free of strings, typical of many unbleached green celeries. An improvement by selection over Utah 10B.

TOP TEN (UTAH TYPE) 130 days

Plants: 22-24" tall, compact, slightly more spreading than Ten Grand, and not too brittle for easy harvesting. Medium dark green foliage with dark green stalk.

Stalk: 8-10" to the first joint. Medium width with narrow groove and small clasp. Slightly ribbed. Medium sized heart with intermediate number of stalks. Mild, pleasant flavor; free from strings. A selection from Utah for improved uniformity of joint length throughout the bunch. A good shipper.

UTAH 52-10B 130 days

Plants: 24-26" tall. Foliage and stalks are dark green. Upright and compact in habit. Moderately brittle but plants are easily harvested.

Stalks: 8-9" long to first joint; uniform, rounded and thick fleshed, glossy in appearance. Crisp, tender and of excellent quality. Very mild flavor even when not bleached. Good heart formation. Blanches readily but usually marketed as green celery. The leading pascal for shipment from California.

UTAH 15H 130 days

Plants: 24-26" tall; numerous stalks are medium dark green with dark green glistening foliage. Plants are erect, dense and compact, and pliable for easy harvest.

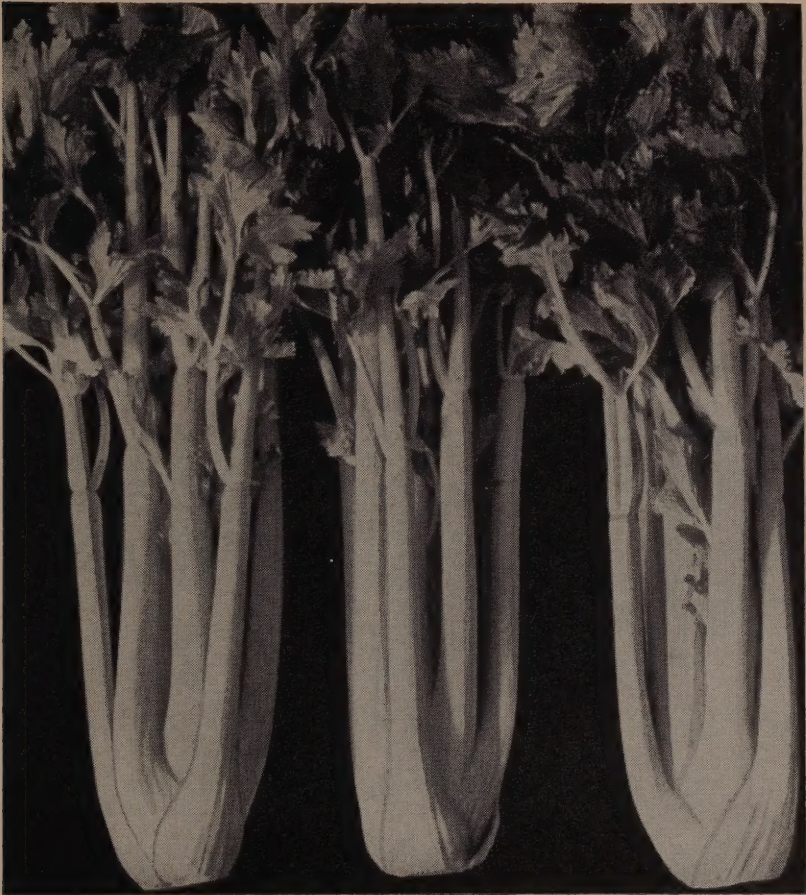
Stalk: 7-8" long to first joint. Narrow petiole with shallow groove and small clasp; thick, rounded and smooth. Large heart with many petioles is very crisp, excellent texture, and fine flavor even when unbleached. Does well on either muck or mineral soils. An improved, refined celery of highest quality. Well adapted to critical trade in the Northeast, but not adapted for long distance shipping.

WHITE PLUME 110-115 days

Plants: 16" tall, uniform, partially spreading but slender plant. Outer foliage light green with white veins and margins; inner leaves blanch to creamy white.

Stalk: 6-7" to first joint. Light green in color; self blanching to a creamy white, crisp, tender, good flavor and quality.
An early market type easily blanched during the summer; does not require hilling as a fall crop.

CELERY — YELLOW VARIETIES



CORNELL 619

CELERY — YELLOW VARIETIES

CORNELL 619 95 days
 Plant: 24" tall Erect; slightly spreading, but dense. Outer leaves medium green and inner leaves light green. Must be harvested with care because of brittleness.

Stalk: 9" to first joint. Thick, medium wide, rounded and smooth ribbed. Improved heart formation. Easily blanched. Excellent quality and flavor; brittle, crisp and tender. Main crop celery. Occasionally bolts as spring crop. Resistant to fusarium yellows but susceptible to blight.

GOLDEN DETROIT (DWARF GOLDEN SELF BLANCHING) . . . 95-100 days
 Plants: 22-24" tall, vigorous, compact, full hearted. Not as blocky as original strain, thus handles and ships better. Foliage yellowish green and sometimes chlorotic on East Coast as plant reaches maturity.

Stalk: 7½-9" to first joint. Fleshy, crisp and solid. Easily blanched to a golden yellow. Mild flavored.

An easily harvested, high quality, golden variety for local shipping.

GOLDEN SELF BLANCHING (PARIS GOLDEN) 85-90 days
 Plant: 20-22" tall, compact, erect. Foliage yellowish green. Erect habit makes for easier harvesting.

Stalk: 8-9" tall. Broad with large clasp. Easily blanched to creamy yellow. Crisp, slightly ribbed; fine, mild flavor.

MICHIGAN GOLDEN (NO. 99 GOLDEN)

A yellow, self-blanching variety developed and sold by Michigan State College. Highly resistant to fusarium yellows but not to other celery diseases. It is a GOLDEN PLUME type of medium height, medium long stem and very easy blanching.

WONDERFUL (GOLDEN PLUME) 85 days
 Plant: 24" tall, erect; slightly spreading, but dense. Outer leaves medium yellowish green.

Stalk: 7-9" to first joint, thick, fleshy, tender and crisp. Good flavor and quality. Easily blanched to creamy yellow.



CORN TRAIL AND BREEDING GROUNDS AT TOLEDO, OHIO

HYBRID SWEET CORN

Hybrid Corns presented here are the result of eighteen years of corn breeding work by our company and close cooperation with the men at the various state and federal institutions doing Sweet Corn breeding work. Without their cooperation and development work, Hybrid Sweet Corn would not be advanced to its today's position in the Sweet Corn field. To these men we express our most sincere gratitude.

Data presented are comparative and taken as an average of our many years of trials. Your maturity dates may vary for a given location, due to soil fertility, climate and growing area.

It is our sincere hope that we may add to or replace these present day hybrids of a given maturity with better adapted, higher producing, better quality, more drought tolerant, insect tolerant and disease resistant hybrids through our extensive breeding and trial program in cooperation with the state and federal institutions.

No phase is overlooked to give you as near perfect seed as is possible from the standpoint of production, which includes careful maintenance of highly productive inbred lines, proper detasseling in production fields, careful harvest, drying and milling with the best modern equipment.

NOTES ON HEAT UNITS

For the first time maturities of sweet corn in this circular are expressed as "Days" and also as "Heat Units". Possibly a better term would be "Degree Hours" as we multiply each day's mean temperature above 50 degrees F. by 24 and accumulate these values each day from planting to harvest. Another system in use is "Degree Days". The heat units given here can be converted to Degree Days by dividing by 24.

The heat unit method of predicting maturity of sweet corn is being used widely and it is for this reason that heat units are given here. The value given for each hybrid represents our standard of top quality whole kernel yellow and cream style white corn.

Days to maturity show much greater variation between hybrids in one season or between seasons for one hybrid than do heat units. Heat units, too, may vary in seasons during which there have been extremes of temperature or rainfall.

Heat units should be used only as an aid for determining planting spread and predicting first harvest. Your heat unit requirement for a given hybrid may vary from those published here according to your particular location or your quality standard. Any heat unit system which you use must be correlated with your test for maturity whether it be moisture, kernel color, or the thumbnail test.

All maturities, heat units, and growing notes presented here are the result of many years trials by Woodruff. All data are relative and, having been determined for one location, may vary in other areas. The fact that these data are relative makes them of great value to you in evaluating sweet corn hybrids in different locations from year to year.

YELLOW HYBRIDS

CARMELCROSS 74 days

A wilt resistant second early market hybrid, produced by Dr. R. Singleton, formerly of Connecticut Agricultural Experiment Station, who developed and combined Inbred C13 and C30.

Ears: 7-7½" long x 1¾" in diameter. 12-14 straight rows produce a well-tipped, slightly tapering ear weighing approximately 8 ounces. The ear is well protected by a heavy husk and long dark green flag ears.

Kernel: Deeper golden than Marcross, medium wide and medium deep, good flavor and good quality in its season.

Plant: 5½' tall, medium breadth leaves, moderately heavy stalk, few suckers, and fair root systems. Vigorous and uniform ear borne 12" from the ground.

A good second early market Hybrid or early canning variety in northern latitudes. Valuable for second planting to avoid main brood of corn borer and eliminate expensive dusting. Requires approximately 40,000 heat units to mature its crop.

★EARLY HYBRID 458 70 days

A recent development by F. H. Woodruff & Sons from our own inbreds.

Ears: 6½-7" long x 1.7" in diameter. 12-14 straight rows neatly arranged to form a slightly tapering medium slender ear, weighing approximately 9 ounces. The ear is well protected by a very green husk that adequately covers the tip. The flag leaves are long, dark green and numerous. Has a long shank that breaks at the first node.

Kernel: Golden yellow, medium breadth, good depth. Quality and flavor good.

Plant: Uniform and vigorous. 5½' tall with strong stalk, heavy tassel, red silk, minimal number of suckers, and good root system. Ears borne approximately 10" from ground.

An early market garden corn for the northern area. Hybrid 458 requires about 37,500 heat units to reach market stage.

†★FROST GOLD 83 days

A combination of our own inbreds developed by F. H. Woodruff & Sons to produce a new hybrid for the frozen and canned whole ear pack.

Ears: 7¾-9" long by 1¾" in diameter. Uniformly 12 rowed, cylindrical, well tipped ear has a very small cob and weighs 9-10 ounces.

Kernel: Uniform rich golden yellow, medium width, excellent depth, fine flavor, excellent quality, and has a very tender pericarp.

Plant: 6½' tall with ears borne 25" from ground. Refined stalk with excellent green color, medium width leaves, few suckers and fairly strong root system. Vigorous and uniform stalk.

This new hybrid has many desirable features, including white interior silk, uniform ear size from year to year, golden kernel color, and tender pericarp, to consistently produce fancy whole ear pack. This variety requires approximately 46,000 heat units.

† **GOLDEN CROSS BANTAM** 83 days

This hybrid, developed by Glenn M. Smith of the Purdue University Agricultural Experiment Station and the U.S.D.A., has been the standard of quality in the canning trade for more than 20 years.

Ear: $7\frac{1}{2}$ " long by $1\frac{3}{4}$ " in diameter. 60%, 12 rowed and 40%, 14-16 rowed ears are cylindrical to very slightly tapered at the tip and weigh approximately 11 ounces

Kernel: Rich yellow, medium width, good depth, good cut-off percentage. Excellent quality and flavor with good pericarp tenderness.

Plant: $6\frac{1}{2}$ ' tall, medium width, dark green leaves. Moderately heavy stalk is well rooted and produces an occasional sucker. Produces a good yield of excellent fodder. The ear is borne 20" from the soil surface.

A good hybrid for most purposes over a wide range of environmental conditions. This variety requires approximately 46,000 heat units.

† **GOLDEN HARVEST** 83 days

This hybrid is the result of inbreds developed by Glenn M. Smith of the U.S.D.A. and Purdue University Agricultural Experiment Station. It is a white silked counterpart of the justly famous Golden Cross Bantam.

Ear: $7\frac{1}{2}$ - $8\frac{1}{2}$ " long by $1\frac{3}{4}$ " in diameter. Predominately 12-14 rowed ear is definitely cylindrical and weighs about 11 ounces.

Kernel: Identical with Golden Cross Bantam in all respects.

Plant: $6\frac{1}{2}$ ' tall, very similar in type to Golden Cross Bantam with an improved dark green color. Ear borne 19" up on stalk.

Equally as desirable as Golden Cross Bantam but has the improvement of white silk. This variety requires approximately 46,000 heat units to mature.

† **★GOLDEN HYBRID 1910** 80 days

This new yellow hybrid was developed by F. H. Woodruff & Sons to serve a dual purpose for the canning trade, for whole kernel or whole ear pack.

Ear: $8\frac{1}{2}$ " long by $1\frac{1}{16}$ " in diameter. The 12-16 rowed ears are long and cylindrical, without too much taper. Well filled at tip, and weigh approximately 11 ounces. The husks are long and extend about two inches beyond the end of the ear.

Kernels: Medium golden, fairly narrow width, good depth, and a very tender pericarp. Silks are colorless beneath the husk.

Plant: 7' tall, medium stalk, dark leaves of modest width. This is essentially a two eared hybrid, with uniform ripening ears placed high on the stalk.

The maturity of this high quality hybrid, 2-3 days earlier than Golden Cross Bantam, plus its high quality as a whole kernel corn makes this indicate that this variety is valuable as a market garden hybrid. The variety requires 43,000 heat units to mature.

★ **GOLDEN HYBRID 2057** 85 days

A combination of recently developed inbreds, produced by F. H. Woodruff & Sons, that matures 2 to 3 days later than Golden Cross Bantam.

Ears: 9-10" long by 2" in diameter. 16-18 straight rows extend to tip of ear. The slightly tapering ear weighs about $14\frac{1}{2}$ ounces and is well protected by a sturdy husk that extends 2-4 inches beyond the tip of ear.

Kernels: Medium yellow; medium width with a tendency to be squarish, producing cut corn with a minimum of variation in kernel width and having good depth for high cut-off percentage. Average quality, very good flavor, reasonably tender pericarp.

Plant: 8' tall with a very vigorous and sturdy stalk, plus an excellent root system. The plant has red silks and tassels and carries its ear 14" from the ground.

Particularly valuable and recommended for the Tri-State area, Southern Pennsylvania, and some sections of Ohio, Illinois, and Indiana, where virulent soil organisms frequently counteract the careful experimental work done to produce an outstandingly high quality hybrid. This variety requires 47,000 heat units to harvest at canning stage.



GOLDEN SECURITY

★**GOLDEN SECURITY** 83 days

A recent introduction by F. H. Woodruff & Sons for the main crop market trade. This hybrid is a combination of two of our own inbreds with ability to produce two ears per stalk.

Ear: 8-8½" long by 1½" in diameter. 14-16 regular straight rows produce a good type cylindrical ear with a slightly tapered tip weighing 11 ounces. A tight vigorous husk restricts ear worm damage to the extreme tip of the ear.

Kernel: Bright golden yellow, narrower than Golden Cross Bantam; deep, tender, good quality and tender pericarp.

Plant: 7½' tall, very sturdy stalk, and wide, vigorous foliage. Excellent deep root system is insurance against drought.

The most productive and adapted two eared hybrid which in commercial plantings has produced 1½ to 2 tons more marketable corn per acre than other varieties in the same season. Well adapted in middle latitude, and a natural for the southern shipping trade. Ears are the proper size for the southern shipping crate, and rugged husk protects ear during shipment. This variety requires 43,600 heat units to produce a marketable ear.

★**GOLDEN SUPERB** 87 days

A recent hybrid produced by F. H. Woodruff & Sons from our own inbreds, to fill the need for a larger-eared, main-season, market garden corn.

Ears: 9-10" by 2" in diameter; 12 to 16 rows, (about $\frac{2}{3}$ of ears are 16 rowed), well filled to tip; almost cylindrical with an abrupt taper. Heavy husks and good tip coverage.

Kernel: Golden yellow, very deep, round shouldered, good quality and reasonably tender.

Plant: 6 $\frac{1}{2}$ ' tall; dark green stalk and foliage, rarely suckered, has a strong root system. Vigorous, dark green ear borne 24" from the ground.

Large eared, dark green, uniform and attractive, mid-season market garden corn that requires 48,000 heat units to produce a mature ear.

HOOSIER GOLD 78 days

An early mid-season hybrid, bred by Glenn M. Smith of Purdue University and U.S.D.A.

Ears: 8-9" long by 1 $\frac{3}{16}$ " diameter. 10-14 rowed cylindrical ear has a tapered tip and is fairly well protected with a medium green husk.

Average ear will weigh between 11 to 12 ounces.

Kernels: Medium golden color with average width and depth. Very good flavor and quality is exceptional for its season.

Plant: 5 $\frac{1}{2}$ ' tall; leaves medium green in color and light stalk. The plant averages 1-2 tillers per stalk and has a vigorous root system. The ear is borne 15" from the ground.

This variety is particularly valuable as a high yielding early mid-season variety with many of the good features, including yield, of standard Golden Cross Bantam. Hoosier Gold requires 42,400 heat units between seeding and market stage.

IMPROVED SENCROSS 75 days

An older variety, produced from our own inbreds, that remains valuable to market gardeners in northern latitude.

Ear: 7-8" long by 1 $\frac{1}{16}$ " in diameter. 12-14 straight rows of kernels produce a very attractive cylindrical ear, similar in most respects to Golden Cross Bantam, but having a little more tip taper. The ears are adequately protected by medium dark, heavy husk, have a medium length shank, and weigh 9-10 ounces.

Kernel: Medium yellow, medium broad, deep and of good quality and flavor.

Plant: 6' tall with ears borne 14" from the ground. Dark green stalk is well rooted, carries medium width dark green leaves, but produces few suckers.

Valuable to the Market Gardener located in areas of uncertain rainfall, who need a drought tolerant, high yielding, second early, yellow hybrid. The variety requires 41,400 heat units to reach maturity.

ILLINOIS GOLDEN HYBRID NO. 10 84 days

A drought-tolerant main crop market hybrid bred by Professor W. A. Huelsen of the University of Illinois.

★ **WOODRUFF INTRODUCTION**

Ears: $7\frac{1}{2}$ -8" long by $1\frac{3}{16}$ " in diameter. 12-14 very straight rows produce a large, almost cylindrical ear weighing approximately 11 ounces. Well protected by large tight husks.

Kernel: Medium yellow; medium width and excellent depth. Good flavor and average quality.

Plants: 7' tall. Stalk and foliage are dark green, plant vigorous, rarely tillered and have an unusually vigorous root system. The attractive ear is borne 26" from the ground.

A vigorous, heavy yielding main crop hybrid, valuable where yield is the primary requirement. The variety requires 46,600 heat units to produce a marketable ear.

IOANA 82 days

A drought tolerant hybrid bred by Dr. E. S. Haber of Iowa State College. The original inbreds have been maintained and selected in F. H. Woodruff's & Sons, critical breeding program to maintain desirable quality.

Ear: $8-8\frac{1}{2}$ " long by $1\frac{3}{16}$ " in diameter. 12-14 straight rows produce a large, attractive, cylindrical ear, well filled at the tip, weighing approximately 12 ounces. The ear is well protected by a moderately heavy husk for shipping and ear worm tolerance.

Kernel: Light yellow, medium width and good depth, good quality and flavor.

Plant: $6\frac{1}{2}$ -7' tall, dark green broad leaves with a well rooted heavy stalk, producing few suckers. Attractive ear borne 22" from the ground.

More drought tolerant than Golden Cross Bantam and has been accepted by the Southern shipping trade. The variety requires 43,500 heat units to mature its ear.

† IOCHIEF 84 days

A recent introduction from the breeding work of Dr. E. S. Haber of Iowa State College, for the market gardener who requires a large ear, and the canner who is interested in a heavy yield with a high cut-off percentage.

Ear: 9-10" long by $2\frac{1}{8}$ " in diameter. 16-18 rows make a very large cylindrical ear that tapers slightly at the tip. Ears weigh approximately 13 ounces.

Kernels: Light golden yellow, narrow and deep. Good flavor, fair quality, and average pericarp tenderness.

Plant: 7' tall, vigorous and well rooted with dark green stalk and leaves.

The ears tend to droop slightly but this feature has not interfered with machine harvesting. The stalks seldom produce suckers, and ears are borne 32" from the ground.

Iochief has produced extremely well under drought conditions. The attractive ear commands a premium for the market gardener, and the high yield and cut-off percentage is of extreme interest to the canner. Iochief requires approximately 46,800 heat units to mature the crop.

IOGOLD 51 77 days

An early mid-season yellow hybrid, developed by Dr. E. S. Haber of Iowa State College. Matures approximately a week earlier than Golden Cross Bantam, and yields compare favorably with that variety.

Ears: 7-8" long x $1\frac{3}{4}$ " in diameter, and have 10-14 rows. Average weight of ears is approximately 12 ounces.

Kernel: Similar to Golden Cross Bantam in shape and color.

Plant: 6 feet tall, moderately heavy stalk and good root system. Uniform ears are borne 18" from the ground.

Because of its excellent quality, this hybrid is especially desirable for processing, particularly for those who want a good variety that will mature ahead of Golden Cross Bantam. Requires 42,000 heat units to mature.

★KATAHDIN GOLD 76 days

A distinctly new hybrid for the Northern production areas, including Canada. Developed by F. H. Woodruff & Sons, from our own inbreds to give an early maturing hybrid that compares favorably with Golden Cross Bantam.

Ear: 7-9" long by $1\frac{3}{16}$ " in diameter. 12-16 rows slightly tapering to an abrupt normally well-filled tip. The inside silks are white. Ears weigh 12 ounces.

Kernel: Medium golden yellow, and medium width kernel that does not broaden out as hybrid is moved into the northern growing areas. Good kernel depth, flavor and quality and acceptable pericarp are unique for such early maturity.

Plants: $6\frac{1}{2}$ ' tall, dark green, medium width leaves; fairly well rooted with ears borne 22" from ground.

This is an outstanding hybrid, for the northern growing areas, because its heavy yield of good quality corn is produced one week earlier than Golden Cross Bantam. Only 41,000 heat units are required to mature the crop to canning stage.

YELLOW HYBRIDS



**VICTORY
GOLDEN**



**ILLINOIS
GOLDEN
NO. 10**



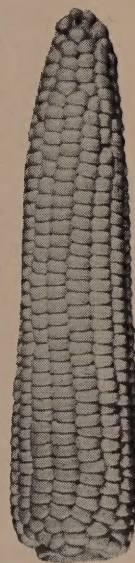
**GOLDEN
SUPERB**



**GOLDEN
SECURITY**



**GOLDEN
CROSS
BANTAM**



IOANA

LEE 80 days

An early midseason hybrid produced with inbreds developed at the Connecticut Agricultural Experiment Station.

Ears: $7\frac{1}{2}$ " long by $1\frac{13}{16}$ " in diameter. 12-16 rows on a large cylindrical ear with well filled tip and good husk coverage. Red silked ear weighs approximately 10-11 ounces.

Kernels: Clear yellow; rather broad, medium depth, good flavor, and medium strong pericarp.

Plant: $6\frac{1}{2}$ ' tall. Sturdy stalk and few tillers. Broad, dark green leaf, sturdy root system. Ear borne 16" from ground.

Primarily a productive market garden variety but has been successfully processed in certain localities. This variety requires 43,400 heat units to market stage.

LINCOLN 80 days

An early midseason yellow hybrid produced from inbreds developed by the Connecticut Agricultural Experiment Station.

Ears: 7-8" long by $1\frac{13}{16}$ " in diameter; very uniform, cylindrical, with well filled rounded tip. Has good husk coverage, weighs 10 ounces.

Kernels: Medium yellow, narrow, shallow. Fair flavor and quality with medium tender pericarp.

Plants: $6\frac{1}{2}$ ' tall. Medium green leaves of refined width. Sturdy stalk produces a few suckers and has heavy root system. Yellow tassel and green silks. Ear borne 18" from the ground.

Predominately a market garden and shipping variety. Lincoln requires 43,600 heat units before corn reaches market stage.

MARCCROSS 71 days

An early market hybrid, made from C13, and inbred from the Connecticut Agricultural Experiment Station, when combined with Woodruff's version of C6a.

Ear: 6-7" long by $1\frac{3}{4}$ " in diameter. Slightly tapered 10-14 straight rows make a well filled tip, ears average about 9 ounces and are well protected with a heavy husk.

Kernels: Light to medium yellow, fairly broad, medium deep, good flavor and quality as a market corn.

Plants: $5\text{-}5\frac{1}{2}$ ' tall, sturdy stalks with vigorous leaves and root system. Ear borne about 11" from the ground.

One of the most widely used early market hybrids. Best adapted to the eastern and northern market garden areas. Marccross requires 38,300 heat units to mature its ears.

NEW JERSEY HYBRID 101 75 days

This new hybrid is the product of the research work of Dr. R. S. Snell of the New Jersey Agricultural Experiment Station.

Ear: 8-9" long x $1\frac{11}{16}$ " in diameter. 12-14 uniform straight rows produce a very attractive ear that is well filled to the tip. Ears, adequately protected by medium heavy husk, weigh 12 ounces.

Kernels: Medium golden yellow, does not become broad as do kernels of Camelcross. Has exceptionally good flavor and quality. Holds well in field.

Plants: 6½' tall, dark green slender stalk with narrow leaves. Well rooted stalks have an occasional sucker. Ears borne 20" from the ground. New Jersey 101 is superior in most respects to Carmelcross, particularly in the middle latitudes, and further into the south where it is very desirable as a first early shipping variety. New Jersey 101 requires only 41,000 heat units to produce marketable ears.

NEW JERSEY HYBRID 106 71 days

A recently released hybrid, the result of the research work of Dr. R. E. Snell of the New Jersey Agricultural Experiment Station. It has produced up to 30% more marketable ears than Marcross in the same early market season.

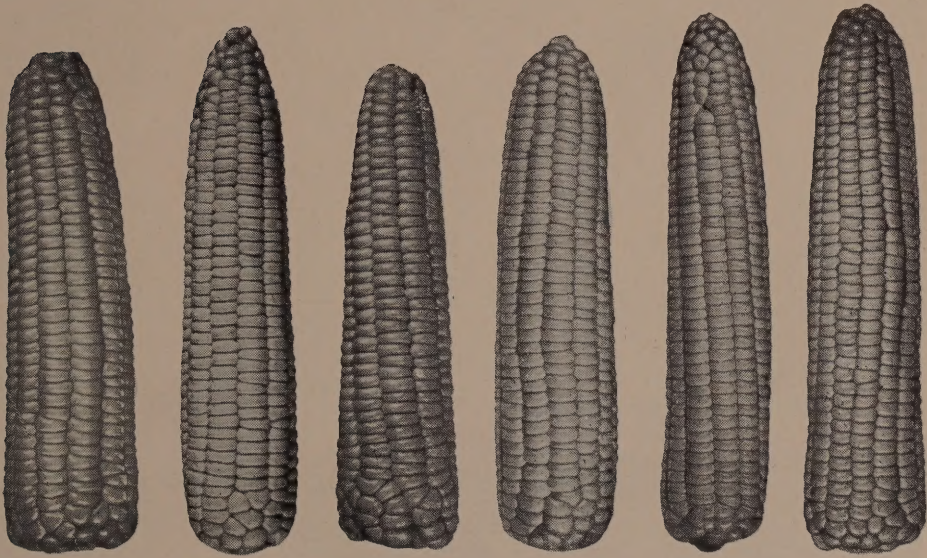
Ears: 7-8" long by 1⅛" in diameter. 12-14 rows neatly arranged to produce a very attractive slim cylindrical ear with a well filled tip that weighs 9-10 ounces.

Kernel: Medium yellow, medium breadth and good depth; very good flavor and good quality.

Plant: 6' tall; vigorous foliage and stalk is well rooted and few suckers. Ears are borne 14" from the ground.

This variety may replace Marcross except in extreme northern range. The large attractive ear requires 38,500 heat units to reach maturity.

YELLOW HYBRIDS



SPANCROSS

**WOODRUFF'S
EARIGOLD**

MARCROSS

**CARMEL-
CROSS**

SENCROSS

LINCOLN

IMPROVED SPANCROSS 68 days

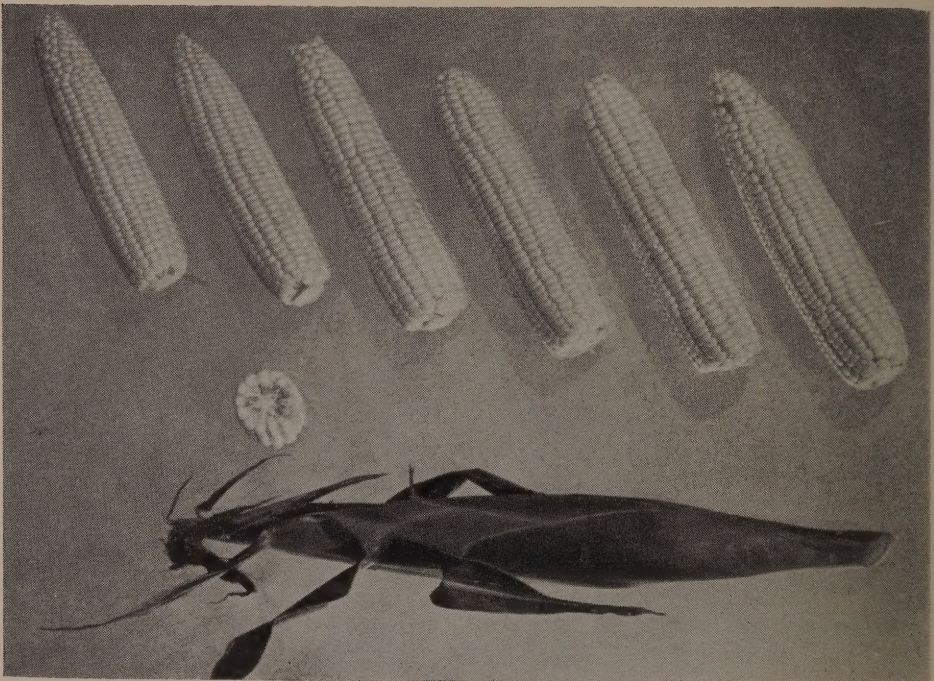
This standard first-early market hybrid was developed at the Connecticut Agricultural Experiment Station, originally from inbreds C13 and C4. Research on the part of Dr. Singleton produced C3 which advanced the maturity of Spancross to assure its role of the first maturing market hybrid. Ear: $6\frac{1}{2}$ to 7" in length by $1\frac{1}{16}$ " in diameter at the butt. 10-12 rows produce a medium size tapered fairly well tipped ear that averages 8-9 ounces. Medium green husk affords fair ear coverage. Kernel: Variable yellow. Acceptable in width and reasonably deep for the season. Quality and flavor only fair and pericarp relatively tough. Plant: $4\frac{1}{2}$ ' tall. Small stalk and short narrow leaves, on a weak root system produces a poor fodder. Spancross requires a very high fertility for best production.

Spancross is the first early market corn in most northern areas and commands a premium price on the market because of its early maturity which requires only 36,000 heat units.

† TENDERGOLD 78 days

Ears: 7-8", cylindrical to tapered at tip, 10-14 rows, straight rowed, well filled tips, medium husk with good tip coverage; ears average 8 oz. Kernels: Medium yellow, medium width and depth, good flavor and quality. Whole kernel appearance is very similar to Golden Cross Bantam. Plants: $6\frac{1}{2}$ -7', medium breadth leaves, medium to dark green, medium heavy stalk, fairly well rooted, few suckers. Produces fair amount of good quality fodder.

A good mid-season market garden variety. Also well adapted for frozen or canned whole ear pack, whole kernel and cream style. Requires 42,400 heat units to mature.



VICTORY GOLDEN

† FREEZING VARIETY

† ★ **VICTORY GOLDEN** 85 days

Because it can be successfully grown in many sections of the country and is equally valuable to the processor, shipper, and the market gardener who wants to produce quality merchandise; Victory Golden is an unusual hybrid. It is the result of a combination of our own inbreds, and was released commercially in 1947 by F. H. Woodruff & Sons. Since that time it has made a phenomenal record.

Ears: 8-8½" long by 1½" in diameter. 14-16-18 straight rows make a very uniform cylindrical, abruptly tapered, well tipped ear. It is well protected from ear worm by a heavy husk that extends well beyond the tip of the ear. Ears weigh 13 ounces.

Kernel: Uniform golden yellow. Uniform kernel width which is maintained by high row number. Excellent depth with high cut-off percentage. Tenderness, flavor, and quality superior to Golden Cross Bantam. Holds for days in the field at prime canning stage.

Plant: 7½' tall, few suckers, sturdy deep green stalks and foliage, with excellent root system. Nearly every stalk produces two ears that ripen simultaneously for a very high yield at one harvest. Ears are borne 24" above the ground and are well adapted to mechanical harvesting. It is also easily hand harvested. Stalks have red tassels, red outside silk, and colorless inside silks. Victory Golden requires 47,000 heat units to produce a prime ear.

Victory Golden is the first choice of the quality packer in all sections of the country. Victory Golden is the primary main season Market Garden variety. Victory Golden has been used successfully by the southern shipper, except in extreme southern areas where Golden Security may be preferred. This two eared hybrid yields 1½ to 2 tons more marketable corn per acre than other standard hybrids in the same season. Yields of 5-7 tons per acre, produces 35-37 cases per ton of fancy cream style pack, and 30-34 cases of fancy whole kernel per ton. Victory Golden can be successfully frozen as a fancy whole kernel pack. Victory Golden requires approximately 2 more days to reach prime canning stage than required by Golden Cross Bantam or 47,000 heat units.

★ **WOODRUFF'S NEW EARLIGOLD** 71 days

An early market hybrid developed by F. H. Woodruff & Sons, maturing in Marcross season.

Ear: 7-7½" in length by 1½" in diameter. Ear has 12 rows and is slightly more cylindrical than Marcross. Average ear weighs approximately half a pound.

Kernel: Bright yellow; fairly broad and medium deep. Quality and flavor good.

Plant: 6' tall. Vigorous foliage and well rooted stalk. Ears are borne 14" from the ground.

A good early hybrid for Market Gardeners, maturing shortly after the first early varieties. Produces well under adverse weather conditions, and when grown on good fertile soil will produce about 200 ears more per acre than Spancross. Requires 38,300 heat units to mature.

WHITE HYBRIDS

- † **COGENT HYBRID, ILLINOIS 8 x 6** 91 days
 Developed by Professor W. A. Huelsen, University of Illinois, for canners.
 Ears: $7\frac{1}{2}$ "-8", zigzag kernel pattern, cylindrical to slightly tapered; well filled tips, ears average 12 oz.
 Approximately 49,600 heat units are required to mature this variety.
- † **COUNTRY GENTLEMAN HYBRID, ILLINOIS 13** 94 days
 Ears: 7-8" long, excellent husk coverage, average weight .68 pound.
 Kernels: Deep, shoepeg type, white, first in quality for either cream style or whole kernel pack.
 Plants: 7' high, sturdy, well eared, good yielder, deep green foliage. Developed by Professor W. A. Huelsen of the University of Illinois.
- † **★COGENT HYBRID 1905** 95 days
 A large eared Cogent Hybrid developed by F. H. Woodruff & Sons for the canning trade.
 Ears: $7\frac{1}{2}$ "-8" long by 2" in diameter; cylindrical and well-fitted to the tip.
 Approximate weight of ear is .85 lbs.
 Kernel: White, shoe-peg type, small and deep.
 Plants: $7\frac{1}{2}$ ' tall, vigorous dark green foliage with excellent root system.
 Ears are borne 26" from the ground.
 This hybrid's performance has been outstanding, consistently producing a high yield of fancy shoe-peg corn. This variety requires 50,000 heat units to mature crop for canning.
- † **EVERGREEN 14 x 13** 93 days
 Developed for canners by Professor W. A. Huelsen of the Illinois Agricultural Experiment Station.
 Ears: $8-8\frac{1}{2}$ ", large cylindrical to slightly tapered, 16-18 rows, straight rowed, well filled, good coverage; ears average $13\frac{1}{2}$ oz.
 Kernels: White, medium breadth, deep, good flavor and quality.
 Plants: 8', narrow to medium breadth leaves, medium dark green, well rooted, single stalked, good leafy fodder.
- † **EVERGREEN HYBRID 3 x 33** 93 days
 Developed by us from midwestern material for good hybrid of STOWELL's season and type.
 Ears: $8\frac{1}{2}$ "-9", very uniform, cylindrical, 16-18-20 rows, straight rowed, well filled tips, excellent husk coverage; ears average 13 oz.
 Kernels: Snowy or chalky white, medium breadth, medium deep to deep, good flavor and excellent quality, heavy yield and high cut; good for whole kernel or cream style pack.
 Plants: $8\frac{1}{2}$ "-9', medium leaves, heavy, stiff stalk, excellent rooting, dark green, many 2-eared stalks, rarely suckered; gives leafy, excellent yield of fodder. 49,400 heat units are required to mature the crop.

★ WOODRUFF INTRODUCTION
 † FREEZING VARIETY

† **EVERGREEN HYBRID A (EARLY EVERGREEN HYBRID)** 91 days
Developed by us from midwestern material to replace open pollinated
EARLY EVERGREEN.

Ears: 8-8½", large, cylindrical, straight rowed, 16-18 rows, well filled tip,
excellent husk coverage of long heavy husks; ears average 13 oz.

Kernels: Snowy or chalky white, narrow, deep, uniform type, good flavor,
thin hulled, good to excellent quality; high cutting percentage.

Plants: 7½-8½', broad leaved, heavy stiff stalk, medium to dark green,
almost suckerless, occasionally 2-eared, well rooted, heavy fodder yield.

† **NARROWGRAIN EVERGREEN 14 x 11** 93 days
Developed for canners by Professor W. A. Huelsen of Illinois Agricultural
Experiment Station.

Ears: 8-8¼", large cylindrical, 16-18-20 rows, straight rowed, well filled,
good coverage, ears average 12¾ oz.

Kernels: White, narrow, very deep, of good quality.

Plants: 8¼', medium breadth leaves, dark green sturdy, well rooted stalk.

This variety requires 49,000 heat units to mature the crop.

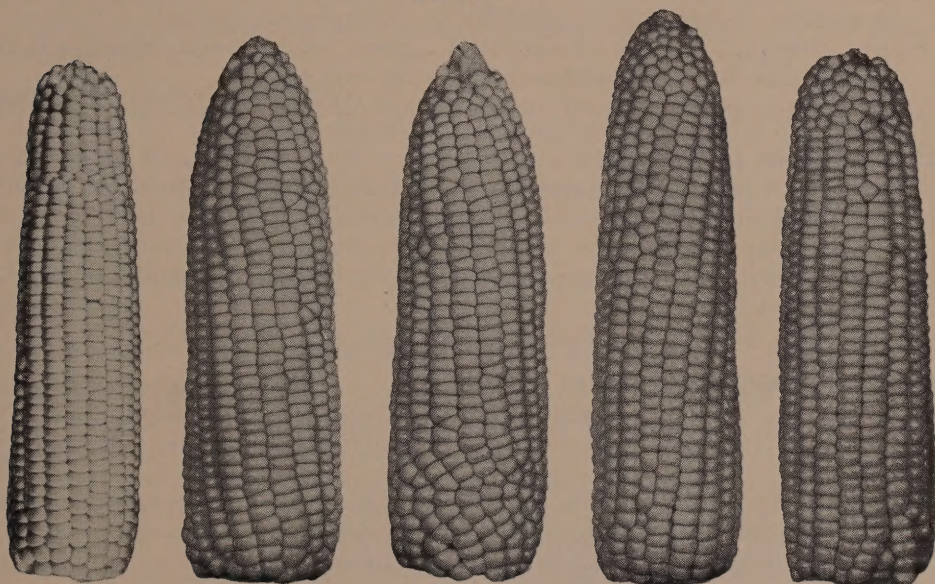
† **STOWELL'S TOPCROSS** 94 days
Developed by us for large eared, uniform STOWELL's type.

Ears: 8-9", uniform, cylindrical to slightly tapered, 16-20 rows, straight
rowed, mostly well filled tips, excellent heavy husk coverage; ears
average 13¼ oz.

Kernels: Creamy white, STOWELL's width, deep, good flavor, and quality,
heavy yield and high cut, very desirable for cream style or whole grain
packs and for marketing where large late white corns are acceptable.

Plants: 8-9', medium breadth leaves, medium heavy, stiff stalk, dark green,
rarely 2-eared stalks or suckers, produces good quality leafy fodder
and probably heaviest fodder yield of all our hybrids.

WHITE HYBRIDS



WHITE
KERNEL
GOLDEN
CROSS

EVERGREEN
"A"

EVERGREEN
3 x 33

NARROW
GRAIN
14 x 11

EVERGREEN
14 x 13

- † **WHITE KERNEL GOLDEN CROSS** 85 days
 Ears: 7½-8" long, average weight .69 lb., 14-16 rows.
 Kernels: Similar to GOLDEN CROSS BANTAM except that the kernels are a creamy white.
 Plants: Stalks 7' tall, more vigorous than GOLDEN CROSS BANTAM with a 6" higher ear placement.
 This is a Woodruff introduction, especially made for the canning trade. and has been very acceptable for early market garden white corn.

YELLOW OPEN POLLINATED VARIETIES

- BANTAM EVERGREEN (GOLDEN EVERGREEN, EVERGREEN GOLDEN BANTAM)** 85 days
 Ears: 7-8", 10-16 rows, cylindrical to slightly tapered, usually well filled tips, straight rowed, heavy loose husk, ears average 10 oz.
 Kernels: Dark yellow to tangerine, broad to very broad, medium depth to deep; good appearance in whole grain pack, good flavor.
 Plants: 6½-7½', medium to dark green, heavy stalk, not too well rooted, occasional suckers.

- BARDEN'S WONDER BANTAM** 76 days
 Large, long eared, coarse kernelled GOLDEN BANTAM strain which will out yield GOLDEN BANTAM under favorable conditions but does not have the quality, flavor, or uniformity of good strains of 8-rowed GOLDEN BANTAM; is more drought and heat tolerant.

- † **EXTRA EARLY BANTAM** 65 days
 Ears: 6-7½", cylindrical, 8-10 rows, straight rowed, fairly filled tips, good husk coverage occasionally developing streamers; ears average 7½ oz.
 Kernels: Variable yellow, mostly dark yellow, medium to broad, shallow to medium depth, fair to good flavor, fair to good quality.
 Plants: 4½-5½', narrow leaves, dark green, well rooted, moderate to heavy suckering, fair fodder considering earliness.
 Early home garden or local market strain where 8-rowed ear is desired.

- EARLY YELLOW SENSATION** 67 days
 Ears: 6-7½", 10-16 rows, cylindrical to slightly tapered, straight rowed, well filled tips, well covered, more resistant to smut and diplodia than GOLDEN EARLY MARKET or SUNSHINE; ears average 9 oz.
 Kernels: Light to medium yellow, medium breadth, medium depth to deep, good flavor.
 Plants: 5-6', dark green, heavy stiff stalked, very few suckers.

- † **GOLDEN BANTAM (ORIGINAL STRAIN)** 75 days
 Ears: 6½-7½", 8 rows, slender, cylindrical, usually well filled tips, straight rowed, well covered with heavy husks carrying streamers; ears average 6 oz.
 Kernels: Deep golden yellow or yellowish orange, broad, medium depth, uniform type making desirable pack, tender and good flavor.
 Plants: 4½-5½', dark green, stiff stalked, usually with one to three large suckers.

GOLDEN EARLY MARKET (EARLY GOLDEN MARKET, GILL'S GOLDEN EARLY MARKET) 75 days

Ears: 6-7½", slightly tapered to tapered, 10-16 rows, straight rowed, moderately filled tips, fair husk covering; ears average 8½ oz.
Kernels: Light to medium yellow, medium to broad, shallow to medium depth, fair to good flavor, fair to good quality. Large eared early market corn.
Plants: 5½-6½', medium breadth leaves, medium dark green, fairly well rooted, few suckers, susceptible to fusarium, diplodia and smut in more humid corn regions.

GOLDEN MIDGET 65-68 days

Ears: 3½-4", 8 rows, cylindrical, straight rowed, moderately well filled tips, good husk.
Kernel: Medium to pale yellow, wide, shallow, excellent flavor.
Plants: 3' tall, very slender, many suckers, weak stalked, ears 4" from ground, dark green with red midrib. A home garden novelty.

GOLDEN SUNSHINE 67 days

Ears: 6-7½", 10-14 rows, cylindrical to slightly tapered, straight rowed, well filled tips, fairly well covered, more susceptible to fusarium wilt, smut and diplodia than EARLY YELLOW SENSATION: ears average 8½ oz.
Kernels: Light to medium yellow, medium breadth and medium depth, very tender and flavorful.
Plants: 5-5½', medium to dark green, moderately heavy, fairly stiff stalked, few suckers.

IMPROVED GOLDEN BANTAM 78 days

Ears: 6-7", 10-14 rows, cylindrical to slightly tapered, well filled tips, straight rowed, fairly well covered; ears average 9½ oz.
Kernels: Medium to dark yellow, medium breadth and medium depth, fairly tender, sweet, good flavored.
Plants: 5-6', dark green, fairly stiff stalked, will develop one or two suckers on fertile soils.

WHIPPLE'S EARLY YELLOW 75 days

Ears: 6½-8", 12-16 rows, slightly tapered to tapered, usually well filled tips, mostly straight rowed, heavy long husk covering; ears average 10 oz.
Kernels: Medium yellow, narrow to medium breadth and medium depth to deep; more variable kernel type than most varieties, good flavor, but variable tenderness.
Plants: 5-6½', medium green, very heavy stalk, mostly stiff stalked, few suckers.

WHITE OPEN POLLINATED VARIETIES

BLACK MEXICAN 77 days

Ears: 5½-7", 8 rows, cylindrical, fairly well filled tips, straight rowed, moderately heavy husk; ears average 7 oz.
Kernels: Snowy white, broad, shallow to medium depth, excellent flavor, usually excellent quality. Characterized by the blue black aleurone which starts to develop in milk stage from micropyle over crown and down sides giving kernels blue black or purple appearance in dry seed stage.
Plants: 5-6', narrow leaves, dark green, well rooted, may be heavily suckered, thrifty, vigorous, prolific, drought and heat tolerant.

COUNTRY GENTLEMAN 90 days
Ears: 61½-8", zigzag kernel pattern, mostly cylindrical with few slightly tapered, usually well filled tips; good husk covering of thin husks, with streamers; ear average 10 oz.

EARLY EVERGREEN 90 days
Ears: 61½-81½", 12-16 rows, cylindrical to slightly tapered, straight rowed, moderately filled tips, fair to good husk covering; ears average 11 oz.
Kernels: Snowy or chalky white, broad, medium deep, type fairly uniform, good flavor, tender under favorable conditions of growth; used for cream style pack.
Plants: 71½-9', medium to dark green, broad leaved, usually stiff stalked, occasional suckers, heavy stalk.

IMPROVED HOWLING MOB (VANGUARD) 82 days
Ears: 61½-8", 12-16 rows, cylindrical to slightly tapered, mostly slightly tapered, straight rowed, usually well filled tips, good husk covering of heavy, coarse husks; ears average 11½ oz.
Kernels: Creamy white, broad, medium deep, fair flavor, usually tender.
Plants: 71½-81½', medium to dark green, broad leaved, heavy foliage, heavy stiff stalks, occasional suckers.

LUTHER HILL 65-68 days
Ears: 31½-4", 8 rows, cylindrical, straight rowed, moderately well filled tips.
Kernels: White, wide, shallow, excellent flavor.
Plants: 3' tall, very slender, ears 4-6" from ground, dark green. A home garden novelty.

STOWELLS EVERGREEN, DEEP GRAINED 95 days
Ears: 71½-91½", 14-18 rows, cylindrical to slightly tapered ears, straight rowed, fairly well filled tips, good to excellent and heavy husk covering; ears average 16 oz.
Kernels: Creamy or ivory white, medium breadth, deep to very deep, distinctive semi-pointed crown in edible stage which becomes characteristic beak in dry seed, good flavor, tender; used in cream style and whole grain pack.
Plants: 8-91½', medium to broad leaved, medium to dark green, heavy stiff stalk, well rooted, few suckers, heavy yield of rather coarse fodder.

ROASTING EAR OR GARDEN CORN

BLAND'S EXTRA EARLY 66-68 days
Ears: 6-7", cylindrical to slightly tapered, 10-14 rows, straight rowed, usually well filled tips, moderate husk coverage.
Kernels: Creamy white, medium breadth to broad, shallow to medium depth, fair flavor.
Plants: 51½-61½', medium breadth leaves, medium green, well rooted, fair fodder.

EXTRA EARLY ADAMS (EARLY BURLINGTON) ✓ 70-72 days

Ears: $6\frac{1}{2}$ - $7\frac{1}{2}$ ", slightly tapered, 10-14 rows, straight rowed, well filled tips, heavy husk coverage.

Kernels: Snow white, medium breadth and depth, fair flavor in prime milk, fair quality.

Plants: $4\frac{1}{2}$ - $5\frac{1}{2}$ ', medium to broad leaved, medium green, stocky, well rooted with extensive root system, rarely suckered, fair fodder yield.

LARGE EARLY ADAMS (IDEAL) 74 days

Ears: 7-8 $\frac{1}{2}$ ", cylindrical to slightly tapered, 10-16 rows, otherwise same as EXTRA EARLY ADAMS.

Kernels: Same type as EXTRA EARLY ADAMS probably averaging a little deeper.

Plants: $5\frac{1}{2}$ - $6\frac{1}{2}$ ', otherwise same as EXTRA EARLY ADAMS.

SILVERMINE 85-87 days

Ears: 8-9", cylindrical, 12-16 rows, straight rowed, very well filled tips, fairly good husk coverage.

Kernels: Snowy white, medium breadth, medium depth to deep, fair flavor.

Plants: 8-9', medium to broad leaves, dark green, well rooted, rarely suckered; good at high altitudes and thrifty on low fertility levels, shows some drought tolerance.

TRUCKER'S FAVORITE (NORFOLK) 82-85 days

Ears: 8-9 $\frac{1}{2}$ ", mostly cylindrical, 10-16 rows, straight rowed, usually well filled tips, good husk coverage.

Kernels: Ivory white, medium breadth, medium depth to deep, good flavor; one of the leading roasting ear varieties.

Plants: 8-9', many broad leaved, dark green, usually well rooted, occasionally suckered, vigorous, thrifty.

TRUCKER'S HYBRID A 85-87 days

Ears: 9 $\frac{1}{2}$ -10", cylindrical, well filled, 12-14-16 row, with very good husk coverage.

Kernels: Medium width, pearly white, in general very similar to TRUCKER'S FAVORITE since inbred lines are of this origin. Good for grain production as well as roasting ears.

Plants: 7 $\frac{1}{2}$ -8', broad, very dark green leaves, excellent root system and few suckers.

HYBRID POP CORN

MINHYBRID NO. 250 95 days

A very productive white hulless hybrid pop corn. Kernels are deep and pointed with an unusually thin skin. When popped they are free of fiber and of excellent eating quality. Ripens early and produces 2 and often 3 small ears per stalk.

PURDUE HYBRID 31 95 days
 Purdue 31 is a yellow hybrid popcorn with very high yields, high popping expansion, and excellent eating quality. The ears are 7" to 8" long with 14 to 16 rows of medium yellow kernels. The plants are 6½ ft. tall, vigorous, and stand up well to time of harvest. Normally this hybrid produces two good ears per stalk. This hybrid has proved to be a favorite for vending machine operators and manufacturers of caramelized corn. Not well adapted to North. Usually used in Illinois, Indiana, Ohio, Missouri, Iowa and Kansas.

POP CORN (OPEN POLLINATED)

GOLDEN HULLESS 80-85 days
 Yellow kernelled strain of JAPANESE HULLESS.

JAPANESE HULLESS (AUSTRALIAN HULLESS) 80-85 days
 White, pointed, fine kernelled; short chunky ears often times "bear clawed" or fasciated at tip, usually 18 or more rows of kernels, many times broken rowed; highest popping volume of any variety giving very sweet and tender popped kernels.

QUEEN'S GOLDEN (GOLDEN QUEEN) 85-90 days
 Medium yellow, pearl kernelled; slender, medium large, straight rowed ears with 12-16 rows; vigorous plant, good yielder, fair to good popper.

SOUTH AMERICAN (GIANT YELLOW, GOLDEN MUSHROOM, SOUTH AMERICAN MUSHROOM) 95-100 days
 This variety of thick hulled flint corn from South America is at present the most popular variety because of heavy yield, wide adaptation and giant sized popped kernels. Dark yellow, pearl kernelled, long slender, large, straight rowed ears with 14-18 rows. Large, vigorous, dark green plant; fair to good popper.

TOM THUMB 95-100 days
 Distinctive, small, bushy, heavily suckered, dark green plant with profusion of "thumb-sized" ears having 10-16 straight rows of fine, pointed, bright golden yellow kernels; excellent popper, low yield because of small size of ears. There is also a white kernelled strain of this variety.

WHITE RICE 90-95 days
 Satiny, translucent white pointed kernels; slender, slightly tapered, medium large, straight rowed ears with 10-16 rows; vigorous plants, good yielder; fair to good popper.

CHICORY

Cichorium intybus

CICCORIA CATALOGNA (RADICHETTA, ASPARAGUS) 60-65 days
 Popular for early greens, being a rapid growing annual; plant has appearance of dandelion, with young seed stalk used in a manner similar to spear or asparagus; both young leaves and seed stalk are edible, tender and of dandelion flavor. Asparagus type recommended for spring planting.

CICCORIA CATALOGNA, QUARANTINE STRAIN
Foliage only moderately cut, thus a greater leaf area per plant. Has only 20-30 leaves per plant and grows partially prostrate. Asparagus type recommended for fall planting.

CICCORIA CATALOGNA, SAN PASQUALE STRAIN 65 days
Foliage deeply cut, shorter than regular CICCORIA CATALOGNA and lighter in color. 40-50 leaves per plant, erect and compact. This strain has a more attractive plant than the QUARANTINE STRAIN. Does not have the asparagus type shoot in center.

WITLOOF (FRENCH ENDIVE) 140-160 days
Used extensively as a salad crop. Parsnip-like root must be graded, re-set, in cold frame or greenhouse in the North to produce a marketable product. Late growth or second growth forms compact, easily blanched head 4-6" long of crisp, tender leaves having distinctive sharp flavor. This is the endive for the epicure as a winter delicacy.

CHIVES

Allium schoenoprasum

CHIVES
Small, clustering, hardy perennial belonging to onion family; produces dense clusters of fine onion leaves which are used in salads or soups and for garnishing.

COLLARD

Brassica oleracea var. *acephala*

BLUE STEM 70-80 days
Plants not as tall as CABBAGE, more spreading and broad-leaved without tendency to form loose head, blue green foliage; pigmented stem.

CABBAGE 60-70 days
Plants 18-24" tall; smooth, large, blue green, loosely folded and crumpled leaves, used for greens in South; usually showing appearance of partially formed cabbage head. Developed from cross of GEORGIA COLLARD and WAKEFIELD CABBAGE.

GEORGIA (SOUTHERN, CREOLE) 70-80 days
Old standard variety. Plants 24-30" tall with very broad, slightly crumpled, spreading leaves; upper leaves show incurling tendency, but not as pronounced as in CABBAGE; pale blue green to medium green foliage.

GREEN GLAZE 75 days
Plants 20" tall, medium size, blue green, loosely cup shaped leaves, occasionally forming a very loose head. The variety is distinct in having a glistening, shiny appearance; much in demand by the southern trade. Variety able to withstand much cold weather without damage to market quality.

LOUISIANA SWEET 85 days
Developed by Dr. J. C. Miller of the University of Louisiana. An excellent quality collard with a larger leaf area on smaller stems. The thick tender leaves have an appealing color. This improvement over Georgia Collards may replace the older variety in many areas.

VATES NON-HEADING 75 days
The plant is low growing, broad and spreading. No true heads are formed, but the inner leaves may curl somewhat. Overwinters in Virginia with practically no injury. The leaves are very broad bladed, thick textured, slightly curled sidewise and lengthwise. Veins very prominent. The color is a brilliant, glossy green, but sometimes grayish green, with a light, waxy bloom. There is no purpling of veins or leaves. It seeds late. Preferred by canners because of the texture and lack of purpling. Bred and introduced by the Virginia Truck Experiment Station, from which the name VATES is derived.

C O R N S A L A D

Valerianella locusta var. *olitoria*

LARGE SEEDED DUTCH 60-65 days
Large, rounded thick leaves of silvery green color, forming rosette growth; used as substitute for lettuce in salads or may be cooked like spinach.

C R E S S

CURLED (PEPPER GRASS) *Lepidium sativum* 45-50 days
Hardy, rapidly growing annual with finely cut and curled deep green foliage; used for garnishing because of pleasant spicy flavor.

TRUE WATER *Rorippa nasturtium aquaticum* 180 days
Hardy, perennial aquatic plant producing small thick bright green leaves on long, slender stem. Prized for salads and garnishing because of sharp, pungent flavor.

UPLAND (SPRING, BROAD LEAVED) *Barbarea verna* 45-50 days
Dwarf plant producing small, notched, oval shaped leaves about 2" long. Very mild flavor. Used in salads.

C U C U M B E R S

Cucumbers have for many years been classified by the color of the little spine borne at the apex of each "wart" on the fruit. The color of the spine is of no importance commercially, and usually cannot be detected readily after fruit has been harvested. The color of the young fruits, and the stage of development at which the mature fruit color is produced, is of considerable economic interest to both the grower and processor. The white-spined varieties are a dark green in the immature stage, retain this color as the fruits mature. The black spined varieties are not so dark as immature fruits, hold their color for a relatively shorter time, and rapidly mature to dark orange color overlaid with bronze. The difference in the rate of color change is accentuated at higher temperatures.

The white spined varieties tend to darken up or retain color when brined, which makes these varieties particularly choice for the "Fresh-style" pack. In contrast the dark spined varieties tend to lose their color or "straw-up" when brined, a valuable feature for standard pack or dills.

We have arranged our cucumber varieties according to the principal use and have indicated the spine color with b.s. for the black spine and w.s. for white spine.

CUCUMBER

Cucumis sativus

PICKLING VARIETIES

BOSTON PICKLING (GREEN PROLIFIC) b.s. 58-60 days
Fruits: 2-2½ x 6-7" when mature for seed; pickles are medium green, slightly tapered. Not as uniform a crop as NATIONAL PICKLING.

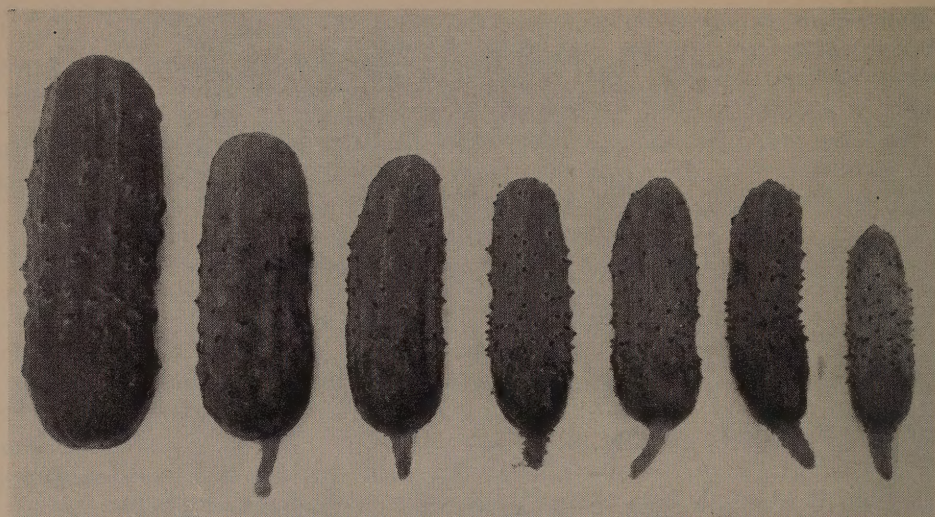
DAVIS BLEND b.s. 54-56 days
Fruits: 2-2½ x 6-7" when mature for seed. Pickles are dark green cylindrical, blocky ends. Very vigorous and high yielding. Exceptionally popular with pickle packers because the growers like the yield.

MAINE NO. 2, (SCAB RESISTANT) b.s. 54-56 days
Fruits: 2-2½ x 6-7" when mature for seed; pickles are light green, inclined to be pointed at both ends. Blocky in middle tapering to both ends. Similar in quality to BOSTON PICKLING. High quality fruit, and very productive vine. An attempt to combine pickling qualities with slicing qualities.

MODEL w.s. 56 days.
Fruits: 2¼-2½ x 6" when mature for seed. Pickles are slightly darker green than National Pickling, similar in shape and size. Neatly symmetrical with very slight taper towards the blossom end. This variety has produced well in the southern pickle area.

NATIONAL PICKLING b.s. 54-56 days
Fruits: 2-2½ x 6½" when mature for seed; pickles are dark green, cylindrical, blocky ends which are retained through all stages of growth; similar in type to SNOW'S PICKLING, but a more symmetrical, uniform strain, making best of all-around pickles. This variety was originally developed by the National Pickle Packers' Ass'n.

OHIO MR 17, (MOSIAC RESISTANT) b.s. 56 days
Fruits: 2½-2¾ x 6-6½" long when mature for seed. Desirable seed cavity, free from air-pockets, producing few bloaters. A little darker green and more slender in the pickling stages than National, with a slight tendency to taper towards the blossom end; well warted, attractive and uniform. Ohio MR17 is very tolerant of Cucumber Mosaic. It will produce marketable fruits over a long season. This variety was released by the Ohio Experiment Station, and is particularly well adapted in the middle West.



OHIO MR 17 PICKLING CUCUMBER

WISCONSIN SR 6, (SPOT-ROT RESISTANT) *cladosporium* b.s. . . 54-55 days

Fruits: 2-2½ x 6½" long when mature for seed. Pickles are dark green, cylindrical with blocky ends; similar in most respects to National Pickling. High yield and satisfactory manufacturing quality, reasonably uniform plant and fruit characters have been combined with uniformly high resistance to Spot Rot in this newer variety. Pickles usually not furrowed, making a fancy pack, notably free of bloaters.

This homozygous spot-rot resistant variety was developed by Dr. J. C. Walker of Wisconsin. He selected resistant types from a cross of Maine No. 2 with National Pickling and used National Pickling as the recurrent parent in a backcross program, followed by a selfing program to fix the type.

WEST INDIA (BURR GHERKIN, PRICKLY) *Cucumis anguria* . . . 59-62 days

Fruits: 1-1½ x 1½-2" when mature; excellent pickles when used very young; mature fruits are thin fleshed and filled with seed; young pickles are pale to medium green, small, oval, very heavily spined. Also used for melon pickles.

SLICING VARIETIES

A & C w.s. 66-68 days

Fruits: 2-2½ x 8½-10", slight taper at both ends, very dark green with indistinct starring at blossom ends, slender, cylindrical, almost round in cross section, small seed cavity; holds color exceptionally well.

CHINESE LONG (JUMBO) w.s. 75-80 days

Fruits: 2-2½ x 14-20", long slender shape with long taper at stem end and rounded at blossom end, round in cross section, apple green or medium green, small to medium seed cavity. Chief value of this variety is its high resistance to mosaic which almost amounts to immunity. We grow our own strain of this variety and are continually selecting for choice types and productiveness, and checking for mosaic resistance.

COLORADO ALL-AMERICA SELECTIONS Silver Medal 1935 w.s. . . . 66-68 days
Fruits: $2\frac{1}{2}$ x $8\frac{1}{2}$ -10", when mature for seed slight taper at both ends, very dark green with indistinct starring at blossom ends, slender cylindrical, almost round in cross section, small seed cavity, holds color exceptionally well.

CUBIT ALL-AMERICA SELECTIONS Bronze Medal 1944 w.s. . . . 66 days
Fruits: $2\frac{1}{4}$ x $9\frac{1}{2}$ " long, blunt-ended, cylindrical. Uniform color and texture. Smooth, crisp, with small seed cavity. It is distinguished by a very dark green skin. Well adapted for fresh market and shipping.

EARLIEST OF ALL w.s. . . . 59-63 days
Fruits: $2\frac{1}{4}$ - $2\frac{3}{4}$ x 7-8" when mature for seed; cylindrical, with short, rather abrupt taper at both ends, medium dark green, productive and fairly uniform setting; green color does not hold well. Used by few for pickles, but mainly used for early shipper in South.

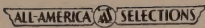
IMPROVED LONG GREEN (LONDON) b.s. . . . 66-69 days
Fruits: $2\frac{1}{2}$ - $2\frac{3}{4}$ x 10-12", long, cylindrical, rounded stem end and abruptly tapered tip, cross section varies from circular to triangular; medium dark green with sparse striping at tip; thick, firm, crisp, flesh with small to medium seed cavity.

IMPROVED WHITE SPINE (ARLINGTON WHITE SPINE) w.s. . 58-62 days
Fruits: $2\frac{1}{2}$ - $2\frac{3}{4}$ x $7\frac{1}{2}$ -8", medium long, carrying long, slight taper through entire length with rounded ends; cross section varies from circular at stem end to triangular at tip; medium green with distinct striping on tip one-third of length; medium to large cavity with thin to medium thick flesh; good flavor and quality. One of the oldest popular strains because of earliness and productivity.

LONGFELLOW (VAUGHAN, WINDEMOOR WONDER) w.s. . . 70-75 days
Fruits: $2\frac{1}{2}$ - $2\frac{3}{4}$ x 12-16", long, cylindrical with round ends, very dark green and color is held well during shipment, circular cross section, moderately thick, good quality flesh, with small seed cavity. Very good shipper.



MARKETER CUCUMBER

MARKETER  Bronze Medal 1943 w.s. 65 days

Fruits: $2\frac{1}{4}$ - $2\frac{1}{2}$ x 8-9" long when mature for seed. Prime fruit a rich dark green with indistinct striping at blossom end. Fruit smooth, slim and cylindrical with a slight taper at both ends. A small seed cavity is enclosed in crisp, bright flesh.

This variety is noted for its high yields of uniform and attractive fruit. An early cucumber with long bearing season, well adapted to fresh marketing.

NIAGARA, (MOSIAC RESISTANT) w.s. 65 days

Fruits: $2\frac{1}{4}$ x 10" long when mature for seed. Uniform fruit, similar in appearance to Cubit; cylindrical, with abruptly rounded ends, dark lustrous skin with faint blossom end striping. Small seed cavity and bright crisp flesh. The fruit has a tendency to curve slightly in certain growing areas and curvature appears to be associated with a necrotic spot on the side of the fruit.

An excellent new, white-spined, slicing variety, bred by Dr. H. M. Munger of Cornell, who has brought together fruit quality and mosaic resistance.

PALMETTO, (DOWNY MILDEW RESISTANT) w.s. 66 days

Fruits: $2\frac{1}{2}$ x 8-9" long, similar to Cubit though slightly more pointed at the ends. Attractive dark green with indistinct striping at blossom end, small seed cavity, good flavor and attractive flesh color. Fairly resistant to Downy Mildew when planted by itself. In mixed plantings with susceptible varieties, sufficient inoculum is available from the Downy Mildew Resistance of Palmetto.

Palmetto is the result of the breeding work done in South Carolina under the direction of Dr. W. C. Barnes. It has proven itself as a productive shipping variety throughout the South Eastern growing area.

SANTEE 5-2, (DOWNY MILDEW RESISTANT) w.s. 70 days

Fruit: $2\frac{1}{2}$ x $9\frac{1}{2}$ " long when mature for seed. Fruit very similar to Cubit; smooth, dark green color, almost free of blossom star, almost cylindrical with rounded ends. This variety, resistant to Downy Mildew, supplements Palmetto and is particularly valuable as a spring crop in the South. The variety was developed by Dr. W. C. Barnes at the Clemson College Truck Experiment Station, Charleston, South Carolina as a high-quality fresh market cucumber with good tolerance of Downy Mildew.

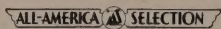
STAYS GREEN (ALWAYS GREEN, BLACK DIAMOND, KIRBY, IT

STAYS GREEN) w.s. 59-62 days

Fruits: $2\frac{3}{8}$ - $2\frac{3}{4}$ x 7-8", very dark green, with few thin stripes at tip, cylindrical, with nearly square ends, very fleshy and good quality; retains color well.

STAYS GREEN, LONG STRAIN w.s. 59-62 days

Fruits: This is long fruited, darker green selection from standard STAYS GREEN, having fruits $2\frac{1}{2}$ x 8-9" and practically no light color at tip.

STRAIGHT EIGHT  Gold Medal 1935 w.s. . 64-68 days

Fruits: $2\frac{1}{4}$ x $7\frac{1}{2}$ - $8\frac{1}{2}$ ", cylindrical, uniform, rounded blunt ends, circular cross section, dark green over entire surface, small seed cavity and medium thick to thick flesh; good quality and attractive. Early and highly productive.

WHITE WONDER b.s. 60-65 days
Fruits: 2½-2¾ x 6-7", medium long oval, with rounded ends, cross section triangular, ivory to creamy yellow with spines varying black to brown, medium sized cavity with medium thick flesh, crisp, very mild, pale ivory; used in salads and as novelty.

WOODRUFF'S HYBRID (CLARK'S SPECIAL, EARLY FORTUNE) w.s. 60-64 days
Fruits: 2½-2¾ x 8-10", cylindrical with rounded ends, almost round in cross section, small seed cavity, medium dark green, thin light green stripes at blossom end; tender and crisp, superior quality.

D A N D E L I O N

Taraxacum officinale

ARLINGTON THICK LEAVED
Plants: Semi-upright, 14-18" in diameter, vigorous, glossy dark green, very leafy and productive.
Leaves: Large, broad, partially toothed, thick and easily blanched, giving fairly tender greens. Pink ribbed.

D I L L

Anethum graveolens

LONG ISLAND MAMMOTH
Plants: 2-2½' tall, extremely cut leaves, making leaves composed only of skeletal tissue.
Seed: Very flat, brown, with strong, bitter flavor; borne in umbels which branch from entire plant; used as flavoring in pickles.

E G G P L A N T

Solanum Melongena var. esculentum

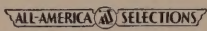
BLACK BEAUTY 80-85 days
Plants: 24-30", erect, compact, large leaved; bear 4-6 fruit.
Fruits: Very dark purple, globular to blunt egg shaped, smooth glossy, fairly uniform; have good retention of color after picking.

EXTRA EARLY LONG PURPLE 75-80 days
Plants: 20-24", semi-erect, freely branching, chiefly used as early market type, bear 5-7 fruits; medium sized clustered leaves.
Fruits: Dark purple to dark bluish purple, long, slender pyriform, fairly smooth, good quality.

FLORIDA HIGH BUSH 85-90 days
Plants: 30-40" tall, very erect, heavy stemmed, holding fruit well above ground, long obovate leaf; bear 2-6 fruits.
Fruits: Dark purple, elongated egg shape tapering gradually to stem end, smooth, moderately variable in color and size; good shipping variety.

FLORIDA MARKET, (PHOMOPSIS RESISTANT) 82-85 days
 Plants: 30-40" tall, very erect and heavy stemmed, rank growing. Productive over a very long season, producing 8-10 fruits late in season. Not adapted in New England but well adapted to Florida.
 Fruits: rich purple black, an elongated egg shape to tapered cylindrical 4" wide x 8" long. Fruit produced high above ground for minimum losses from ground rots. This variety occasionally produces a green-fruited plant but losses from this are negligible.
 Introduced in 1951 by Dr. P. Decker of Florida Experiment Station, who produced this variety by crossing a resistant Oriental form with Fort Myers Market. The variety is resistant to Phomopsis but must be rotated to control Verticillium and Fusarium Wilts.

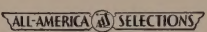
FORT MYERS MARKET 85-90 days
 Plants: 30-36", erect, strong stemmed, fruits borne well above ground; productive over long period and very vigorous; bear 4-6 fruits.
 Fruits: Bell shaped, 5-6" by 6½-8", very deep purple. Smooth and rarely lobed.

NEW HAMPSHIRE HYBRID  Silver Medal 1939 68-73 days
 Plants: Earliest strain; developed by Prof. J. R. Hepler of the New Hampshire Station, 12-16" tall, spreading, heavily branched, medium sized leaves; bear 5-8 fruits; very productive.
 Fruits: Dark purple, blocky egg shape, smooth, glossy, uniform producer of high quality fruits; excellent northern variety for home garden or local market.

NEW YORK SPINELESS (IMPROVED LONG PURPLE) 85-90 days
 Plants: 30-36" tall, large, erect, compact, branched, large leaved, bear 4-6 fruits.
 Fruits: Deep purple, broad oval to blunt egg shape, smooth, uniform, very good quality; leading home garden and market type.

ENDIVE

Cichorium endivia

FULL HEART BATAVIAN  Silver Medal 1934 . 85-90 days
 Plant: Large, leaves broad, partially curled, deep compact head, blanches easily. More vigorous, earlier and more uniform strain than old BROAD LEAVED BATAVIAN. This is the escarole of commerce.

FLORIDA DEEP HEART 90 days
 Plant: An improvement over BROAD LEAVED BATAVIAN with larger, broader and thicker leaves and having an upright habit in the heart. Dark green, heavily crumpled outer leaves turn upwards to clear the soil and protect the heart. The deep, compact, well filled, ascending, headlike heart blanches readily to an attractive creamy-yellow color, simulating a Boston type lettuce.
 Florida Deep Heart is rapidly becoming the most popular broad-leaved variety for market gardening and shipping as the escarole of commerce.

GREEN CURLED RED RIBBED (PANCALIER) 96-100 days
Plant: Large, late, coarsely toothed variety similar to RUFFEC, but with midrib rose tinted and foliage darker shade of green.

RUFFEC (GREEN CURLED WHITE RIBBED) 94-97 days
Plant: Large, spreading, dense growth of long toothed outer leaves and thick, upright full tuft of small leaves in center which can be bleached readily. Midribs are white, broad, thick, and tender.

WHITE CURLED 96-100 days
Plant: type similar to RUFFEC, but pale green, more finely cut and curled, and smaller, blanches easily to creamy white heart.

H E R B S

CULINARY, MEDICINAL AND AROMATIC

A—Annual B—Biennial P—Perennial

Herbs are the oldest continually grown group of cultivated plants and are again becoming popular in home gardens. The following list gives some of those which are more popular in this country and is by no means a complete list. We have drawn freely from the following reference material in compiling this group of modern herbs: Clarkson, Rosetta E., 1939, *Magic Gardens*, XVIII + 370 pp., Macmillan Co., New York, N. Y., and Kamm, Minnie Watson, 1938, *Old Time Herbs for Modern Gardens*, XI + 256 pp., Little, Brown and Co., Boston, Mass.

ANISE *Pimpinella anisum* A
Plants 14-18" tall, creamy or lemony white blossoms; roots and leaves are celery-like; seeds used in baking and leaves for garnish or in cordials. Not the same as FLORENCE FENNEL which is sometimes called SWEET ANISE. Do not transplant.

BALM (LEMON BALM) *Melissa officinalis* P
Low growing plant with fragrant, lemon scented leaves which are used in medicinal teas and for flavoring liquors; also grown for oil valued in perfume.

BASIL, SWEET *Ocimum basilicum* A
Purple flowered plants 12-18" tall; light yellow green, clove flavored, highly aromatic foliage is excellent for seasoning omelets or soups and as garnish for salads; oil used in perfumes; this is the popular BASILICO NAPOLITANO of the Italians.

BORAGE *Borago officinalis* A
Hardy, fuzzy, much branched, coarse, sprawling plants 15-22" tall; violet, star shaped flowers prolifically borne give aromatic flavor to drinks; small tender leaves having cucumber-like flavor used for potherb, seasoning and garnishing; excellent bee plant.

- CARAWAY** *Carum carvi* B
Carrot like foliage grows 18-24" tall in second year bearing white flowers and seed in umbels; seed used for seasoning bread, confectionery, condiments and meats as well as for volatile oils.
- CORIANDER** *Goriandrum sativum* A
Plants hardy, 2-2½' tall with white flowers and finely cut foliage; seeds used in bakery, confectionery and beverage flavors; foliage has slightly disagreeable odor.
- LAVENDER, SPIKE** *Lavendula spica* P
Half hardy plants 2-2½' tall, erect, bushy; used the same as TRUE LAVENDER; widely used because of heavy yield of volatile oil.
- MARJORAM, SWEET or KNOTTED** *Origanum marjorana* A
Tender, bushy plants 18-24" tall; aromatic and pungent, young leaves used in soups, salads, omelets and poultry stuffing; slow germinating.
- ROSEMARY** *Rosemarinus officinalis* P
Plant 2-3', tall with dark, very glossy green foliage and tiny light blue flowers; spicy nutmeg aroma and warm balsam taste; leaves used as seasoning in meats and soups and the extracted oils of the blossoms are used in toilet waters.
- SAGE, BROAD LEAF** *Salvia officinalis* P
Plants 12-16" tall, hardy, spreading, silvery gray green foliage; has pleasant aromatic odor and mildly pungent flavor; most commonly used of all the herbs; used in sausage, cheese, dressings, and teas; salviol oil counteracts effects of fatty foods.
- SORREL NARROW LEAF (SILVER LEAF)** *Rumex acetosa* 55-70 days
Plants produce long, slender, bright apple green to medium green, thick, curled-edge leaves of mildly acid flavor.
- SUMMER SAVORY (BOHNENKRAUT)** *Satureia hortensis* A
Hardy plants 10-18" tall, bushy, small leaved, tiny purple and white blossoms, decorative border plant; entire plant aromatic and when dried is used for seasoning dressings, soups, salads, and teas.
- SWEET FENNEL** *Foeniculum vulgare* P
Usually treated as annual growing about 3' tall with finely cut leaves; used in salads and teas; seed used in flavoring confections and medicines; young shoots of perennial growth used in soups and fish sauces.
- FLORENCE FENNEL (ITALIAN, FINNOCHIO)** *Foeniculum dulce*
Plants: 28-30" tall; compact, flattened and folded leaf petioles form celery-like bunch above a bulb-like enlargement at base of petioles which is used like celery or for seasoning soups; sweet, anise flavored.
- THYME, FRENCH (COMMON, NARROW LEAVED)** *Thymus vulgaris* P
Similar to ENGLISH THYME but with narrow leaved, gray green foliage and more sprawling growth.

K A L E

Brassica oleracea var. *acephala*

BLUE SCOTCH (DWARF BLUE CURLED SCOTCH) 55-60 days

Very hardy; plants 12-14" high and 20-28" spread; compact, thick leaf set; leaves are heavily curled, plume-like, blue green, thick and of good flavor and quality. This hardy variety used in late fall and early spring for delicious greens.

DWARF GREEN CURLED SCOTCH (NORFOLK, DARK GREEN MOSS CURLED) 55-60 days

Very similar to BLUE SCOTCH but foliage is deep yellowish green, which may fade on exposure to cold weather. Equally productive with BLUE SCOTCH where cold hardiness is not a factor.

DWARF SIBERIAN LONG STANDING (PHILADELPHIA DWARF GERMAN, GERMAN SPROUTS) 60-65 days

12-14" tall by 24-30" wide, vigorous, sprawling plant, bearing coarsely serrate slightly savoyed, large leaves; deep green with bluish tinge. Makes larger spread of plant than BLUE SCOTCH, but not as compact or dense leaved.

TALL SCOTCH 85-90 days

Tall, erect, heavily leaved plants, 24-30" high, bearing heavily curled or plume-like leaves of bright medium green color. Very tender after being frosted.

VATES, (NEW STRAIN) 60 days

Plants: 10" high by 20" wide, hardy; has very compact habit, with short petioles and short internodes to produce a rounded "rosette" type plant that hugs the ground. Leaves heavily curled, finely cut, good dark green, thick bladed with good flavor and quality. The shingled arrangement of the leaves offers better protection against whipping winds and low temperature damage.

The newer strain of Vates produces a smaller plant with slightly paler foliage. Closer spacing and heavier applications of fertilizer will increase yields and improve foliage color.

K O H L R A B I

Brassica oleracea var. *caulorapa*

PURPLE VIENNA, EARLY 59-63 days

Small, purple leaved plant with globular purple bulb, flesh tender, crisp, white and flavorful.

WHITE VIENNA, EARLY 55-60 days

Similar to PURPLE VIENNA, but bulbs are pale green, almost white, and foliage is pale green.

LEEK

Allium porrum

AMERICAN FLAG (LONDON FLAG) 140-155 days

Popular strain, having long, thick, stem with large, medium green, drooping leaves, stems 1-1½" thick and 7-10" long.

BLUE LEAF 145 days

Similar to AMERICAN FLAG but leaves broader at base, deeper bluish green. Stems 1¼-1¾" thick, slightly bulbous at base with blanch of 6-8".

CARENTAN (MONSTROUS CARENTAN or WINTER) 150-165 days

Very thick, shorter stemmed strain, having deep blue green, more erect leaves, productive type and also more hardy at low temperature, stems 2-2½" thick and 5½-7½" long.

MUSSELBURG (GIANT MUSSELBURG) 145-160 days

Long, thick, white stemmed with drooping, bright, medium green leaves; similar to AMERICAN FLAG, but longer stemmed. Stems 1-1½" thick and 9-10" long.

LETTUCE

Lactuca sativa var. *capitata*

w.s. after variety name indicates *white-seeded*, and b.s., *black seeded*.

BUTTER HEADING VARIETIES



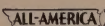
WHITE BOSTON

BIG BOSTON (TROCADERO) w.s. 74-77 days
 Heads: Medium size, compact, oblate to globular; outer leaves light green, glossy, only slightly crumpled, margins lightly bronzed; interior light golden yellow, excellent quality; dependable header under drought and heat; much used for cold frame forcing, as well as outdoors.

OAK LEAF w.s. 40-43 days
 Heads: Indefinite head, cabbage butter type, light green, medium size, leaves deeply lobed like large oak leaves, tender, resistant to heat. It is an old variety which is returning to popularity.

WHITE BOSTON (UNRIVALLED) w.s. 73-76 days
 Heads: Similar to BIG BOSTON but pale green with no trace of bronzing; interior green tinged creamy, tender, sweet. Very desirable local market strain.

CRISP or CABBAGE HEADING VARIETIES

GREAT LAKES w.s.  **ALL-AMERICA SELECTION** Bronze Medal 1944 . . . 82 days
 Heads: Large, vigorous, solid dark green, glossy and well folded, ribs rounded and medium large.
 It was developed by Michigan State College and the U.S.D.A., and is slow bolting and resistant to tip burn. Profitably grown in areas where conditions are unfavorable for other heading lettuce.

HANSON IMPROVED w.s. 80-83 days
 Heads: Large, globular, compact, light green; outer leaves yellow green, broad, thick, curled; interior crisp, clear white, sweet. Favorite home garden and local market type.

ICEBERG w.s. 82-85 days
 Heads: Large, broad, well folded, firm, oblate to globular; outer leaves light green with wavy bronzed edges, crumpled; interior crisp, very sweet, green-tinged white. Choice home garden and local market strain showing some heat tolerance.

IMPERIAL NO. 44 (NEW YORK NO. 44) w.s. 80-83 days
 Heads: Medium large, hard, well formed, globular; outer leaves medium green, tightly folded, crumpled, very large; interior good quality, very crisp, white. Valuable in South and East because of heat tolerance and resistance to tip-burn; also good header on muck and peat.

IMPERIAL NO. 152 w.s. 82-85 days
 Heads: Medium large, firm, round, rather exposed, slightly crumpled; outer leaves large, spreading, medium light green; interior crisp, translucent white, tender; resistant to brown blight but fairly susceptible to tip-burn, dependable header. Good shipper. West Coast counterpart of IMPERIAL NO. 44.

IMPERIAL NO. 456 (NEW YORK NO. 456) w.s. 80-82 days
 Heads: Large, solid, ribby, dark green, resists tip burn. Produces hard heads during periods of high temperature. Developed by Cornell University and the U.S.D.A. Adaptable for muck.

IMPERIAL NO. 615 w.s. 83-86 days

Heads: Very large, well folded, firm, mostly globular; outer leaves large, coarse, spreading, silvery green, only slightly crumpled; interior crisp, juicy, white.
Developed as large heading strain from IMPERIAL NO. 152 and has same habit of growth, disease resistance and shipping quality.

IMPERIAL NO. 847 b.s. 83-86 days

Heads: Medium large, solid, round to oval, well covered, attractive, crumpled; outer leaves large, thick, fairly smooth, pale to medium green; interior tender, crisp, green tinted white; widest adaptation of IMPERIAL strains, being more tip burn resistant and a dependable header; resistant to brown blight. Valuable home garden, local market and shipping strain.

JADE b.s. 80-83 days

Heads: Large, uniformly subglobe, with no tendency towards balloon heads, well protected by numerous dark green overlapping wrapper leaves. Interior pale green, solid, crisp and flavorful, similar to Imperial 44.
The variety will stand for a reasonable length of time without bolting. Outer leaves very large, very dark green, coarsely savoyed and frilled. This variety shows the most promise in the irrigated valleys of the Southwest where its yield exceeds that of Imperial 152 and Imperial 44 when planted as a fall crop. Its resistance to cold on later stages of growth permits its use when low temperatures would injure Imperial 152 and Imperial 44. Jade has shown promise as an early spring crop in the Middle Atlantic states.
This variety was developed at the Plant Industry Station, Beltsville, Maryland from the breeding work of Dr. Ross C. Thompson.

★LAKE SUPERIOR 80-82 days

Plant: Moderately large with overall spread 16-18"; large frame, comparatively few leaves. Outer leaves broadly cupped and upturned on outer edge. Guard leaves erect and taller than head; cap leaf completely overlapping, protecting head from sunburn. A distinct, bright apple green color outer leaves and wrapper.
Heads: 5½-6 x 6" deep green outside. Usually conic before fully developed, but becoming fully rounded at maturity; small cored, narrow inconspicuous ribs; very solid; interior of head a pale green to cream.
A successful market garden variety well adapted for use as a fall-maturing lettuce on the west coast and south west; very useful for spring lettuce on the east coast because Lake Superior is very tolerant of high temperatures and tipburn. Lake Superior is an excellent long distance shipper. It produces a very uniformly maturing crop, predominantly of top size heads.
Lake Superior is an exclusive introduction of F. H. Woodruff & Sons Inc., developed by Harold N. Coulter in our Sacramento breeding grounds. It is a line-bred strain of Great Lakes produced from an outstanding single plant selection.



LAKE SUPERIOR LETTUCE

NEW YORK (WONDERFUL, LOS ANGELES) w.s. 80-83 days

Heads: Large, firm, oblate to round, tightly folded; outer leaves medium yellow green to medium green, large, broad, semi-spreading, edges curled and notched; interior crisp, well blanched to creamy yellow, sweet. Forerunner of the shipping strains of NEW YORK and IMPERIAL type.

NEW YORK NO. 12 (NO. 12 EARLY MOUNTAIN ICEBERG) w.s. 78-81 days

Heads: Early, sure heading, medium large, compact, oblate to nearly round, uniform, well covered, but leaves not as long as IMPERIAL strains; outer leaves medium size, medium green, slightly crumpled semi-erect; interior crisp, white, thin leaved and tender; tolerant to heat. Local market strain.

PENNLAKE w.s. **SELECTIONS** Bronze Medal 1948 84 days

Heads: 5 x 5", globe shape, solid, crisp, some tip burn, very little slime. Slow bolting, dark green, uniform.
Developed by Dr. M. T. Lewis, Penn. State College, State College, Pennsylvania. A dependable second early variety for eastern muck soils.

PREMIER GREAT LAKES W.S. **ALL-AMERICA SELECTIONS** Bronze Medal 1948 78 days

Heads: Large, uniform, compact, slow bolting, dark green leaves, leaves folded well over top giving a high percentage of perfect heads.

Developed by Dr. M. T. Lewis, Penn. State College, State College, Pennsylvania. A earlier maturing Great Lakes strain well adapted to mineral soils.



WOODRUFF'S A-36

★**WOODRUFF'S A-36** W.S. 86 days

Plant: Medium to large diameter, large frame, short stem. Wrapper leaves protect the head from the sun. Foliage very dark green. Leaf size is large, with finely divided wavy edge and an exceedingly refined blister, lacking the coarseness of Great Lakes, Imperial 44 and 456.

Heads: 6 1/2" wide x 6" deep. Outer head leaves are firmly attached in a way that reduces wrapper loss when cutting and trimming. Head is very solid, interior well blanched, medium size core. Good long distance shipper.

Tolerant of hot sun and showed no tipburn at Milford. Holds up well under wet weather conditions and is at least tolerant of bottom rot or leaf drop. Heads remain marketable for long time and do not burst nor develop brown midrib necrosis as does Great Lakes under adverse conditions. A field can be cut clean in two cuttings. The variety has a vigor that is lacking in many of the modern, closely inbred strains. Preferred for spring maturing lettuce in California.

LOOSE LEAVED VARIETIES

Lactuca sativa var. *crispa*

BLACK SEED SIMPSON b.s. 43-46 days

Plants: Similar in both plant and leaf type to WHITE SEEDED SIMPSON: usually shows more yellow-green over-all color. Plant mounds up in center to leave impression of greater height.

GRAND RAPIDS U. S. NO. 1 b.s. 43 days

Plants: large, upright, nicely compacted or bunched leaves in center of plant. Individual leaves are large, broad, crumpled, fringed and have a deeply cut margin and heavy frill. Center leaves medium green in color. A very early forcing variety, developed by Dr. I. C. Jagger of the United States Department of Agriculture as a very popular, hardy, slow bolting, mildew resistant successor to the older strains of Grand Rapids.

PRIZEHEAD (BRONZEHEAD) w.s. 47-50 days

Plants: Rapid growing, medium size, tender, curled and fringed, leaves medium green with reddish bronze tint overlaid on all leaves exposed to light; very crisp.



LETTUCE TRIALS AT MILFORD

SALAD BOWL ALL-AMERICA SELECTIONS Gold Medal 1950 45-48 days

A new type of Lettuce, designed for packaging in cellophane envelopes. This variety superficially resembles an endive. It has a bland flavor.

Plants: A rapidly developing but slow-bolting compact, loose-leaf rosette, made up of medium green, deeply lobed leaves set closely together on a short central stem. The large, tender, sweet leaves retain the highest quality and hold their flavor and texture even under high summer temperature.

Salad Bowl lettuce was produced in the breeding program of Dr. R. C. Thompson at the Plant Industry Station, Beltsville, Maryland. It is recommended for the home and for market gardeners who cater to a specialty trade.

WHITE SEEDED SIMPSON (EARLY CURLED SILESIA, EARLY CURLED

SIMPSON) w.s. 43-46 days

Plants: Early, large, compact, light green, with leaves forming tight bunch in center of rosette, leaves large, frilled and crumpled. Standard home garden variety.

ROMAINE or COS VARIETIES

Latuca sativa var. *long, folia*

DARK GREEN COS w.s. 65-70 days

Heads: Medium large, cylindrical with long tapered tip, well closed and solid; outer leaves very dark green, long, finely savoyed; interior creamy to golden yellow, crisp, with endive-like flavor.

PARIS WHITE COS (TRIANON, WHITE PARIS SELF FOLDING) w.s. 65-70 days

Heads: Similar type to DARK GREEN COS with medium to light green foliage which gives an interior of pale greenish white. Most popular variety of this type and widely used.

PARRIS ISLAND COS, (MOSIAC RESISTANT) w.s. 70 days

Heads: Very similar to Dark Green Cos, cylindrical, fairly well-closed on top; interior, pale-green to creamy, solid, crisp, very little astringency. Outer leaves erect, very dark-green, medium-fine savoy.

Parris Island is not immune to mosaic but produces a very high percentage of marketable heads under conditions where older varieties can no longer be produced. Particularly well adapted to the Southeast.

This resistant, romaine lettuce was introduced by Dr. W. C. Barnes of Clemson College Truck Experiment Station at Charleston, South Carolina.

MUSKMELON

see under CANTALOUPE and MUSKMELON

MUSTARD

Brassica juncea vars.

CHINESE SMOOTH (ELEPHANT'S EAR, LARGE SMOOTH LEAF) 50-60 days

Plants: 18-24" in diameter, spreading, medium bolter, productive.

Leaves: Very large, broad oval, slightly puckered with scattered notching on margin, thin to medium thick, fairly tender, mild flavor, bright, medium green.

FLORIDA BROAD LEAF 50-60 days

Plants: 16-22" in diameter, spreading, slow bolting, fairly productive.

Leaves: Large, broad, oval, smooth with coarsely serrated margin and distinctive broad, flattened, greenish white midribs, thick, dark green with bluish tinge.

FORDHOOK FANCY (OSTRICH PLUME) 60-70 days

Plants: 15-18" in diameter, erect, compact, very slow bolting, bright, pale green, productive, resembles BLOOMSDALE LONG STANDING Spinach in plant habit.

Leaves: Deeply fringed and ruffled edges, heavily curled, long obovate when flattened, medium thick, tender, makes good quality greens and attractive salads, mild flavor.

✓ GIANT SOUTHERN CURLED, LONG STANDING ✓ 60-70 days

ALL-AMERICA SELECTION Gold Medal 1935

Plants: 18-24" in diameter, semi-erect, very large, spreading, medium yellowish-green, very productive, very slow bolting.

Leaves: Large, long, oval to slightly obovate, deeply cut edge which is ruffled and curled, surface of leaf crumpled, thin to medium thick, fairly tender, mild flavor.

TENDERGREEN (MUSTARD SPINACH, KOMATSUMA) *B. perviridis* 45-55 days

Plants: 16-22" in diameter, semi-erect, rapid growing, glossy dark green, spreading, heat and drought resistant, very slow bolting.

Leaves: Large, spatulate, entire, partially dentate and notched, smooth surface, slender creamy white rib prominent, very mild flavored, supposed to have a "creamy mustard" flavor, medium thick and tender.

OKRA or GUMBO

Hibiscus esculentus

VELVET or SMOOTH TYPES

EMERALD 55 days

Pods: 6-8" x $\frac{3}{4}$ ", dark green, long, slender, tapering at tip, velvet or non-ridged pod; spineless, slender and thick walled. Some growers report this variety is easily snapped rather than cut.

Plants: $3\frac{1}{2}$ -4' tall, uniform, sturdy; a heavy-leaved vigorous strain, very prolific.

Developed primarily as a canning and freezing variety by Campbell Soup Company and introduced in 1950. The round cut sections of these pods do not fragment easily when processed.

LOUISIANA GREEN VELVET ALL-AMERICA SELECTION H.M. 1941 . . . 60 days
 Pods: 6 to 8" by $\frac{3}{4}$ - $\frac{7}{8}$ ", light green, spineless, long, slender, tapering through entire length; very tender at market stage, ribless and do not fragment too badly when cut for processing.
 Plants: 5' tall, erect, pods borne close to stalk, extremely prolific and vigorous grower.
 Louisiana Green Velvet, produced by Dr. J. C. Miller, is an improvement in retention of pod color during processing over the older Louisiana White Velvet.

WHITE VELVET (LOUISIANA STRAIN) . . . 60-65 days
 Pods: 6-8" x $\frac{7}{8}$ "-1", creamy white, straight, spineless, tapered, ridgeless, fleshy, tender, fine quality, round.
 Plants: 5' tall, heavy foliage, prolific.
 A uniform, established velvet variety for home gardening. The pod color is too pale for successful processing.

RIDGED or FLUTED TYPES

CLEMSON SPINELESS ALL-AMERICA SELECTIONS S. M. 1939 . . . 55 days
 Pods: 6-8" x $1\frac{1}{2}$ ", rich green, ridged, straight with short taper to tip, entirely spineless, good quality and very uniform.
 Plants: 4-4 $\frac{1}{2}$ ' tall, similar to Perkins Mammoth Podded; sparser foliage and free of irritating spines.
 This excellent variety, developed at the South Carolina Experiment Station, is increasing in popularity each year for use by the home and market gardener.



DWARF GREEN LONG POD

DWARF GREEN LONG POD 50 days
 Pods: 7 to 8" x 1¼", very dark green with short taper at the tip, only slightly ridged; spineless, flesh tender and of excellent quality.
 Plants: 2½ to 3' tall; leafy, only occasionally branched. Pods set early and plant produces a heavy yield.
 A dwarf variety for earliest crop and for use in Northern areas.

PERKINS MAMMOTH IMPROVED 55-58 days
 Pods: 7-9" x 1¼", bright deep green, tapering at the tip, moderately ribbed, slender and fleshy, excellent quality when young.
 Plants: 4' tall, sturdy, moderately branched; vigorous and productive.
 A very select strain of Perkins Mammoth and a definite improvement by having a shorter, more productive plant, fewer spines and more slender pods; a leading fresh market variety.

PERKINS MAMMOTH TALL STRAIN 62-65 days
 Pods: 7-9" x 1¼-1½ tapered, straight, ribbed, fleshy and spined; very good quality.
 Plants: 5-6' tall, heavy foliage, productive, often attains a greater height in the South.
 This is the original type of Perkins Mammoth which has proven to be very valuable in the southern gardens. Seed not always available because this variety is being replaced by Perkins Mammoth Improved, Dwarf Green Long Pod and Clemson Spineless.

PERKINS SPINELESS 53-55 days
 Pods: 7 to 8" x 1¼", bright green, straight, reasonably slender; tapered, ridged and spineless. Very good quality.
 Plants: 3½ to 4', dwarfish, well foliaged, early and prolific.
 A newer variety that is the result of a cross between Clemson's Spineless and Campbell's Long Green made by Campbell's Soup Company to produce more slender, spineless pod. A distinct improvement over Perkins Mammoth.

O N I O N **BULBING TYPES** *Allium cepa* F₁ Hybrids

AUTUMN BROWN 110 days
 Bulbs: Medium sized, round-oblate with good shoulders and base. Attractive dark brown shell is made up of 3 layers. The inner skin is dark brown and very tenaceous during storage. Flesh creamy white, fine textured, pungent.
 A very attractive Brigham type onion with excellent appearance after storage.

AUTUMN SPICE 102 days
 Bulbs: Medium size, round to slightly oblate with small neck and root plate; skin heavy and tough, brown, well retained during grading and storage; flesh creamy white, pungent, crisp, and very firm.
 The medium maturing, greyish-green plants produce uniform bulbs of exceptional uniformity from a wide range of upland soil types.
 An hybrid, with excellent keeping qualities, maturing in season with Early Yellow Globe.

BROWN BEAUTY 102 days
 Bulbs: Large round to slightly prolate, with rounded base; attractive dark brown, tough skin, is well retained in storage. Flesh creamy white, fine grained, succulent, mildly pungent.
 An earlier maturing sweet Spanish type.

GRANEX 87 days
 Bulb: Medium sized, oblate to flattened globe with a tendency towards flat or concave tops. Light yellow scales are thin, few in number and are not retained well. Excellent quality, mildly flavored flesh.
 This very vigorous short-day hybrid is a combination of inbreds produced by the United States Department of Agriculture under the direction of Dr. H. A. Jones. The size and yield compares very favorably with Texas Early Grano 502. Granex has good shipping qualities and is an excellent keeper under field conditions when stored in the open in the Imperial Valley. It is particularly valuable in Texas and the Imperial Valley where the soil is infected with "Pink-Root".

YELLOW VARIETIES

BRIGHAM YELLOW GLOBE (BRIGHAM STRAIN, SOUTHPORT YELLOW GLOBE) 110-115 days
 Bulbs: Medium large, deep globe with rounded base, solid; skin dark yellow, very tough; flesh crisp, solid, clear white to creamy. Excellent storage onion very widely used in the Midwest.

EXCEL (YELLOW BERMUDA NO. 986) 72-78 days
 Honorable Mention 1948
 Bulbs: A little deeper than standard Bermudas and considerably larger. Flesh is cream colored and very mild. Exceptionally productive and uniform. Almost free from bolters and doubles. Not supposed to be a good keeper. Valuable as a shipper, particularly in Texas, where extreme uniformity results in high yield.
 Developed by the U.S.D.A. in cooperation with the California and Texas Experiment Stations.

GOLDEN GLOBE (GOLDEN MARVEL) 115-120 days
 Bulbs: Medium large, bottlenecked globe or thick pyriform shape; skin dark golden, thick, tough; flesh creamy yellow, crisp, firm, mild. Very good storage or market type.



IOWA YELLOW GLOBE NO. 44

IOWA YELLOW GLOBE NO. 44 100-105 days

Bulbs: Uniform, medium-large, globular to slightly elongate with very desirable rounded shoulder and base, small neck and root plate; skin medium dark yellow, scales few in number, a little thin but tenaceous; flesh creamy white, firm, mild and succulent. Plants medium tall, vigorous, producing uniformly ripening and rapidly curing bulbs that keep well in storage.

An excellent direct-seeded variety, the bulbs of which will satisfy the most critical trade.

TEXAS EARLY GRANO NO. 502 88 days

Bulbs: Medium large, modified top shape, relatively wide at the shoulders and tapering towards a small root plate. Light yellow scales are thin and few in number. Flesh soft and mild. Bulbs valuable for immediate sales only and should not be stored.

A newer, short day, early maturing variety adapted to fall planting in Texas and the southwest. This spring ripening strain was selected by Dr. Henry A. Jones of the United States Department of Agriculture to minimize the losses to the grower from nonbulbing or early bolting plants which are the result of adversely cold weather that frequently occurs in this area during the winter growing season.

UTAH SWEET SPANISH 113-118 days
Bulbs: Selection from **YELLOW SWEET SPANISH**, showing better keeping quality; differs from **YELLOW SWEET SPANISH** in having amber skin and smaller neck.

UTAH SWEET SPANISH, JUMBO STRAIN 120 days
A selection for bulb size from Sweet Spanish, a little later in maturity, but retaining excellent qualities of parental type. Has a darker skin and a relatively smaller neck than original Sweet Spanish; appears to have better keeping quality and more resistance to thrip than the parental type.

VICTORY (JAPANESE, EBENEZER) 100-105 days
Bulbs: Medium size, thick flat to flat; skin dark yellow, thick, tough; flesh creamy yellow, crisp, sweet; very productive. Early marketing onion when grown from set. Our strain is particularly adapted to produce long keeping sets.

★**WOODRUFF'S EARLY YELLOW GLOBE** 95-100 days
Bulbs: Medium large, globular to slightly flattened; skin deep yellow, thick; flesh creamy to green tinged cream, tender, sweet. Sure bulbing strain, excellent for early market.

YELLOW BABOSA 88 days
Bulbs: Distinctly top shape with wide shoulders and a small neck. Small protruding root base; skin light yellow and tends to shed easily. Flesh firm, crisp, creamy white, very mild flavored. Plants medium size, bluish green, reasonably uniform.
Used exclusively as shipping variety when fall planted in Texas and the Pacific Southwest, where conditions of 12 hour day and low temperatures induce bolting in inadapted varieties.

YELLOW BERMUDA 90-95 days
Bulbs: Medium sized, flat; skin thin, light straw; flesh creamy, very mild. Early market strain grown in Southwest.

YELLOW GLOBE DANVERS 105-110 days
Bulbs: Medium large, round; skin coppery yellow, medium thick; flesh firm, yellow tinted white, mildly pungent. Hardy, productive, good storage, and shipping variety.

WHITE VARIETIES

CRYSTAL WAX (BERMUDA CRYSTAL WHITE WAX) 90-95 days
Bulbs: Medium size, flat, juicy, mild, crystal white. Used for shipping, but not suitable for storage. Grown for first early shipment in South.

CRYSTAL WAX (L. 690) 85 days
Developed and released by the U.S.D.A. and the Texas Agricultural Experiment Station, jointly; this variety has no special resistance to insects and disease, but seems to have fewer doubles and bolters than present commerical strains, is free from "off colors," and matures a few days later than **EXCEL**.

- SOUTHPORT WHITE GLOBE** 112-117 days
 Bulbs: Medium large, beautiful globe shape, solid; skin silvery white, thin, delicate; flesh waxy white, fine grained, crisp, mildly pungent. Popular winter keeper.
- WHITE BABOSA (WHITE GRANO)** 90 days
 Bulbs: Large, sweet, firm, mild, top shaped, white, and non-bolting. Developed by New Mexico Experiment Station. Particularly adapted for use on the Pacific Coast and Texas as an early market and shipping onion.
- WHITE BARLETTA (QUEEN)** 90 days
 Bulbs: Small, flat, transparent white, mild, sweet flavored. Used for pickling and green bunching.
- WHITE LISBON** 95-100 days
 Bulbs: Grown almost entirely as early bunching onion, but bulbs, when mature, are globular, clear white, with juicy crisp, mild flavored flesh.
- WHITE PORTUGAL (SILVERSKIN)** 100 days
 Bulbs: Medium sized, flat, white, mild pleasant flavor, solid and fine grained; all purpose white variety, used for pickling, green bunching, storage and sets; skin is silvery white; well adapted and good producer.
- WHITE SWEET SPANISH** 110-115 days
 Bulbs: Similar to YELLOW SWEET SPANISH in type, but having clear white skin, smaller neck and white flesh. Fair storage onion. Largest of white varieties.
- WHITE VICTORY (WHITE JAPANESE)** 100 days
 Bulbs: Large, semi-flat, clear white, solid fleshed, mild flavored; has stronger top than WHITE PORTUGAL.

RED VARIETIES

- RED WETHERSFIELD** 100-105 days
 Bulbs: Large, thick flat, solid, skin deep purplish red, heavy; flesh pink tinged white, solid, crisp, mildly pungent. Old standard variety for storage; now widely used for sets, with less importance for storage; excellent keeper and shipper.
- SOUTHPORT RED GLOBE** 113-118 days
 Bulbs: Medium large, deep globe, solid; skin deep burgundy, thick and tough; flesh pink tinged white, crisp, brittle, pungent. Excellent storage onion, productive.

BUNCHING TYPES

Allium fistulosum

- EVERGREEN WHITE BUNCHING (HE-SHI-KO, NEBUKA)**
 Bulbless perennial which forms long, slender, leek-like, silvery white stalks used for bunching; onions produced in clusters of 4-9 and are twice the size of ordinary bunching onions. Advantages: grown from seed; white skin, eliminating stripping for market.

BELTSVILLE BUNCHING

A white skinned, white fleshed, hardy, basal multiplying, vigorous, perennial bunching onion. The over-winter plants produce from 4-6 scallions, uniform in size and exceptionally mild in flavor. The variety can be seeded in the late spring or early summer to be used for scallions during the first year as it does not "top-burn". Late in the season the variety produces a slight basal enlargement for use as shanks. The following season the plants produce very desirable scallions. The variety possesses considerable resistance to "pink-root" and "smut" and is immune to "Yellow Dwarf". Beltsville Bunching may replace Southport White Globe, White Portugal and White Welsh by eliminating consecutive plantings where the latter are used to produce "rare-ripes" or scallions. The principle use of Beltsville Bunching will be the production of scallion type onions by the market gardener. Beltsville Bunching was produced by Dr. Henry Jones at the United States Department of Agriculture at Beltsville, Maryland.

P A R S L E Y

Petroselinum hortense

DARK GREEN ITALIAN (PLAIN LEAF) 75-85 days
Plants. Spreading, dense, long stemmed, medium to dark green foliage with leaves coarsely cut but not curled; used for flavoring.

HAMBURG PARSNIP ROOTED *Petroselinum hortense* var. *radicosum* 85-95 days
Foliage like parsley, but plants form edible roots resembling slender parsnips in shape and color; may be stored in winter; used for flavoring soups, like celeriac.

MOSS CURLED (DOUBLE CURLED, TRIPLE CURLED) 70-80 days
Plants: Compact, 7-10" tall; foliage very dark green, with very finely cut and curled leaves; used for garnishing.

P A R S N I P

Pastinaca sativa

ALL AMERICAN 125-130 days
Roots: 8-10" long, 2-2½" diameter at shoulder, 1½-2" diameter at throat, creamy white, tender flesh, hollow crown, small collar, fairly smooth and almost free of fibrous roots.
Tops: 16-22" tall, strong, dark green, vigorous and hardy.

HOLLOW CROWN (GUERNSEY, IDEAL, STUDENT) 130-135 days
Roots: 9-11" long, 2¼-3" diameter at shoulder, 1¾" diameter at throat, creamy, crisp, brittle fleshed, hollow crown, medium collar, occasional ridges with few scattered side roots.
Tops: 18-24" tall, strong, dark green, hardy.

- WHITE MODEL** 125-130 days
 Roots: 6½-8" long, 2-2½" diameter at shoulder, 1½-2" diameter at throat, almost chalky white, crisp, hollow crown, fairly smooth, very few side roots.
 Tops: 16-22" tall, strong, dark green, frost hardy. Well adapted to muck land where root develops a pure white color and does not branch.

PEAS

Pisum sativum

SMOOTH SEEDED VARIETIES

- ALASKA WILT RESISTANT** 58-60 days
 Pods: ½" wide, 2¼-3" long, straight, pale green, plump and blunt, borne singly, mature uniformly; contain 6-8 peas.
 Peas: Small, round, bluish green, usually very uniform in appearance, 35% sieve 3, 90% sieve 2-4.
 Vines: 30-33" tall, slender, leaves widely spaced, foliage pale green or light blue green.
 Seed: Small, round, smooth, medium blue or gray green.

- ALASKA H. F. 30** 60 days
 Similar to ALASKA W. R. except the plant has more vigor which gives a little larger berry and a little larger yield.

- AMEER (BOUNTIFUL, CLAUDIT, MAMMOTH POD ALASKA)** . . . 57-60 days
 Pods: 3-3½" long, slightly curved, medium green, plump, pointed, borne singly, contain 6 to 8 peas.
 Peas: Medium size, round, light green.
 Vines: 30-34", fairly uniform, medium green.
 Seed: Medium size, round bluish green, slightly dimpled.

- CREOLE** 70-72 days
 Pods: 2¾-3" long, medium green, borne single and paired, well filled and blunt.
 Peas: Light green, medium size.
 Vines: 4½' tall, medium light green, vigorous, prolific.
 Seeds: Smooth, dimpled, cream to light green in color. Adapted to the South.

- FIRST AND BEST (MORNING STAR, PEDIGREE EXTRA EARLY)** . . 56-59 days
 Pods: 2¼-3" long, straight, light green, plump, blunt, borne singly, contain 6 to 7 peas.
 Peas: Medium size, round, light green, fair quality.
 Vines: 24-30", slender, medium green, hardy, good yielder.
 Seed: Medium size, round, dimpled, creamy white to greenish white.

LAXTON'S SUPERB (EARLY BIRD) 57-60 days
 Pods: $\frac{1}{2}$ - $\frac{5}{8}$ " wide, $3\frac{1}{2}$ -4" long, curved, light green, pointed and plump, borne singly, uniform cropper, contain 7-9 peas.
 Peas: Medium size, round, medium green, uniform in appearance.
 Vines: 19-23" tall, being dwarf of type, large leaved, stipules prominent, foliage light to medium green.
 Seed: Medium size, round, seed appears to be mixture of smooth and slightly wrinkled, medium blue green. Not the same as the English "Early Bird" variety.

WOODRUFF'S FROST RESISTANT 56-58 days
 Similar to FIRST AND BEST, but pods average shorter and vines are more hardy for early spring planting in the South.

WRINKLED SEEDED VARIETIES

† **ALDERMAN (DARK POD TELEPHONE)** 74-76 days
 Pods: $\frac{1}{2}$ - $\frac{5}{8}$ " wide, $4\frac{1}{2}$ - $5\frac{1}{2}$ " long, dark green, straight with rounded point, plump, well filled, borne singly, mature uniformly, contain 8-10 peas.
 Peas: Large, round to round oval, dark green, excellent quality, tender and sweet, excellent for freezing and shipping.
 Vines: 54-60" tall, dark green, medium heavy stem, coarse foliage, prolific and hardy grower.
 Seed: Large size, wrinkled, light green.
 This strain is resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 8%; 3 and 4 — 18%; 5 and over — 74%.

AMERICAN WONDER (NOTT'S EXCELSIOR) 60-62 days
 Pods: $2\frac{1}{2}$ -3" long, straight, medium green, blunt, borne singly and doubly.
 Seeds packed tightly, contain 6 to 7 peas.
 Peas: Medium size, round, compressed, green, tender, flavorful.
 Vines: 13-16", dark green, stocky, productive.
 Seed: Medium size, squarish, green.

CANNER KING  **SELECTIONS** Bronze Medal 1937 67-69 days
 Pods: $3\frac{1}{2}$ " long, slightly curved, borne singly and doubly, blunt, medium green, 7-9 peas.
 Peas: Light green.
 Vines: Medium green, similar to PERFECTION.
 Seed: Green, medium size, wrinkled.
 Resistant to fusarium wilt. Not the same as the European Canner King (Roi des Conserves).
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 11%; 3 and 4 — 33%; 5 and over — 56%.

† FREEZING VARIETY

CLIMAX

66-68 days

Pods: $2\frac{3}{4}$ " long, blunt, borne double, light green color.

Peas: Light green, small size, 6-7 in each pod.

Vines: 3' tall, slender, medium to dark green. Similar to GREEN ADMIRAL.

Seed: Small, green.

Resistant to fusarium wilt. A second early canning variety.

Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 24%; 3 and 4 — 44%; 5 and over — 32%.



DARK GREEN PERFECTION

† DARK GREEN PERFECTION

66-68 days

Pods: $3\frac{1}{2}$ " long, large, broad, dark green; 8 to 9 berries per pod.

Peas: Medium size berries, with excellent quality and color for freezing.

Vines: 30", dark green, sturdy and prolific.

A wilt resistant Perfection Strain, the berries of which are adapted to quick freezing as well as canning.

Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 13%; 3 and 4 — 38%; 5 and over — 49%.

DWARF TELEPHONE, DARK POD (DAISY, CARTER'S DAISY) . . 72-75 days

Pods: $4\frac{1}{2}$ " long, slightly curved, light green, fairly plump, pointed, borne singly and doubly; contain 7 to 10 peas.

Peas: Large, nearly round, light green, sweet, excellent quality.

Vines: 22-28", light green, branching, vigorous, fairly productive.

Seed: Large, roundish, bluish, tinged green with small percentage of cream.

This strain is wilt-resistant.

† FREEZING VARIETY

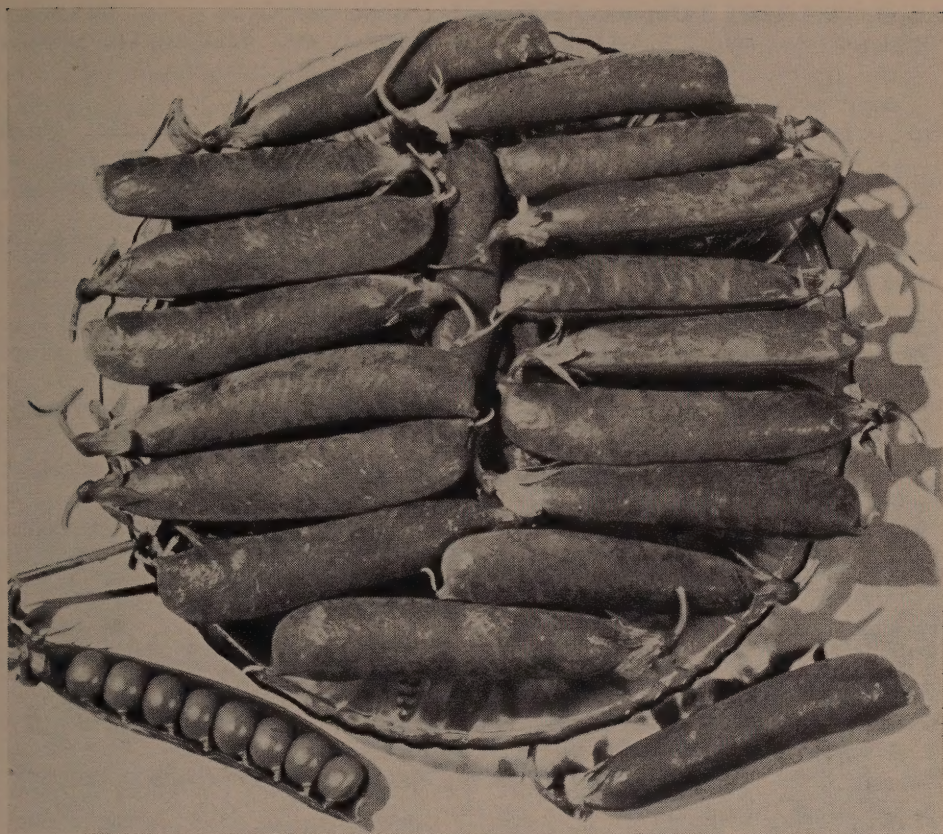
EARLY HARVEST 62 days
 Pods: 2¾", slightly curved, light green, blunt ended, borne singly, plump, well filled, 6-8 berries.
 Peas: Medium size, light green, round, tender skins, excellent flavor.
 Vines: 30" tall, slender, weak straw but more vigorous than Surprise, medium green in color.
 Seed: Small, green.
 An early wrinkled pea for canning.
 Resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 17%; 3 and 4 — 45%; 5 and over — 38%.

EARLY PERFECTION 3852 68 days
 Pods: 3¼-3½" long, borne doubly, light green, blunt, straight, plump; 7-8 medium size berries.
 Peas: Good concentration in lower sieve sizes; high quality and color.
 Vines: 35-36" tall, dark green, prolific; fairly strong straw.
 Seed: Small, medium dark green.
 Resistant to fusarium wilt and noted for small sieve size peas.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 24%; 3 and 4 — 45%; 5 and over — 31%.

EARLY WORLD'S RECORD 58-61 days
 Pods: ¾" wide, 3¾-4" long, mostly straight, light to medium green, rounded point at tip, plump, borne singly; contain 7 to 8 peas.
 Peas: Large, round to oval, intense dark green with thin skin; used for freezing and market; 40% sieve 6, 90% 4-6.
 Vines: 28-33" tall, medium heavy with well scattered coarse foliage, light to medium green.
 Seed: Large, green and cream colored, medium fine-wrinkled, round.

EASY MONEY 62-66 days
 Pods: ¾-7⁄8" wide, 3¾-4¼" long, slightly curved, dark green, blunt, and plump, tapered at tip, borne singly, contain 6-8 peas.
 Peas: Large, round, medium green, tender; used by some for canning.
 Vines: 22-26" tall, dark green, heavy stem, coarse foliage.
 Seed: Large, wrinkled, cream and green.

EVERBEARING (BLISS EVERBEARING) 72-76 days
 Pods: 3-3½" long, straight to curved at tip, dark green, blunt, plump, borne doubly; contain 5-7 peas.
 Peas: Very large, round with flattened ends, light to medium green, good quality and flavor.
 Vines 24-30" tall, dark green, stocky, coarse branching foliage.
 Seed: Very large, flattened, cream and bluish green with the majority cream.
 Resistant to fusarium wilt.



FREEZONIAN

- † **FREEZONIAN** ALL-AMERICA SELECTIONS Bronze Medal 1948 63 days
 Pods: $3\frac{1}{2}$ " long, blunt ended, dark green.
 Peas: Large, dark green and attractive.
 Vines: 30" tall, medium heavy, dark green.
 Seed: Large, wrinkled.
 An excellent wilt resistant variety for the garden or quick freezing.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 10%; 3 and 4 — 22%; 5 and over — 68%.

- EARLY GRADUS, (GRADUS, PROSPERITY)** 62-64 days
 Pods: $3\frac{1}{2}$ -4" long, straight, medium green, pointed, plump and round borne singly; contain 6-8 peas.
 Peas: Large, oblong, sweet, medium green, fine flavored.
 Vines: 28-33" tall, light green, moderately dense foliage, vigorous and fairly productive.
 Seed: Large, elongated, cream and green.

† FREEZING VARIETY

LAXTONIAN (BLUE BANTAM, PETER PAN, HUNDREDFOLD) . . . 60-62 days

Pods: $\frac{5}{8}$ - $\frac{3}{4}$ " wide, $4\frac{1}{4}$ - $4\frac{3}{4}$ " long, slightly curved, dark green, pointed and plump, borne singly, maturity is fairly uniform; contain 7 to 8 large peas.

Peas: Large, oval or elliptical in cross section, medium to dark green, excellent quality and flavor; used for canning, freezing and market.

Vines: 18-21" tall, dark green, heavy stem, coarse foliage, with very prominent stipules.

Seed: Large, flattened, mixture of cream seed with sprinkling of apple green, yellow endosperm, large dimples in surface.

LAXTON'S PROGRESS 60-62 days

Pods: $\frac{5}{8}$ - $\frac{7}{8}$ " wide, 4-5" long, moderately curved, glossy dark green, pointed and fairly plump, borne singly; contain 7 to 10 large peas.

Peas: Similar in appearance to LAXTONIAN, dark green, very good quality and flavor; used for market.

Vines: 16-20" tall, very prolific, similar vine appearance to LAXTONIAN but more compact.

Seed: Similar type of mixed color to LAXTONIAN, but majority of seed is apple green in contrast to LAXTONIAN which has practically all seed cream colored.

LITTLE MARVEL 61-63 days

Pods: $2\frac{3}{4}$ -3" long, straight, dark green, very plump, blunt, very tightly packed, borne singly and doubly, contain 6-8 peas.

Peas: Large, compressed round, dark green, exceptional quality and flavor, finest quality of all present varieties.

Vines: 15-18" tall, stocky, dark green, heavy foliage, prolific.

Seed: Medium sized, squarish, medium green.

† MIRACLE 68-70 days

Pods: 4- $4\frac{1}{2}$ " long, dark green, borne singly and doubly, distinctly curved, pointed.

Peas: About 10 to a pod, deep green, large.

Vines: 48-54" tall, vigorous, light green, stout stems.

Seed: Deep green, medium large, wrinkled.

A freezing variety.

Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 23%; 3 and 4 — 33%; 5 and over — 44%.

MORSE'S MARKET 67-70 days

Pods: $4\frac{1}{2}$ -5" long, curved, dark green, pointed, fairly plump, borne singly; contain 7 to 9 peas.

Peas: Large, round, medium dark green, good quality for home garden and market.

Vines: 24-30" tall; medium green, heavy, coarse foliage; heavy stemmed, vigorous and productive.

Seed: Large, round, cream and green. Resistant to fusarium wilt.

PROGRESS NO. 9 62 days

Pods: $4\frac{1}{2}$ " long, large, pointed, borne singly, looks puffy.

Peas: Large, dark green, attractive.

Vines: 16" tall, coarse, dark green. Very similar to LAXTON'S PROGRESS.

Seed: Large, green.

NEW ERA 68-70 days
 Pods: 3" long, borne singly and doubly. Light green, blunt ended, straight, well filled but not "tight podded"; 6 medium size berries per pod.
 Peas: Excellent color and skin for canning.
 Vine: 28" determinate, medium dark foliage; heavy, sturdy straw with 7 pods per plant.
 Seed: Medium size, drum shaped; cream and green.
 Resistant to fusarium and near wilt.
 Developed at the University of Wisconsin Agricultural Experiment Station.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 19%; 3 and 4 — 51%; 5 and over — 30%.

NO. 4683, (CANSWEET, ALSWEET) 56-58 days
 Pods: $2\frac{3}{4}$ ", light green, borne singly, straight, blunt, tightly packed.
 Peas: Small, light green, similar to ALASKA.
 Vines: 28-30" tall, slender, light green foliage.
 Seed: Small and green, wrinkled.
 A canning variety.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 18%; 3 and 4 — 52%; 5 and over — 30%.

PERFECTED WALES (RANGER) 72-74 days
 Pods: $3\frac{1}{2}$ ", borne doubly, blunt, light green.
 Peas: Light green, large. Similar to PRINCE OF WALES.
 Vines: 36-38", prolific and vigorous, medium dark green.
 Seed: Large, light green, but not as light as PRINCE OF WALES.
 An excellent large berried canning strain resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 5%; 3 and 4 — 24%; 5 and over — 71%.

PERFECTION, EARLY 66-68 days
 Pods: $3\frac{1}{2}$ " long, borne singly and doubly, light green, blunt, straight, plump.
 Peas: Medium size, green.
 Vines: 30" tall, dark green, vigorous.
 Seed: Medium green, medium size.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 9%; 3 and 4 — 25%; 5 and over — 66%.

PERFECTION, WILT RESISTANT 70-72 days
 Pods: $1\frac{1}{2}$ - $5\frac{1}{8}$ " wide, $3\frac{1}{2}$ " long, straight, medium green, not quite blunt tipped, slightly curved, borne doubly; contain 7 to 8 peas, attractive.
 Peas: Medium size, round, medium green, uniform type makes an attractive pack.
 Vines: 29-34" tall, moderately heavy stem with profuse coverage of medium sized leaflets, medium green foliage.
 Seed: Medium size, green.
 A canning variety. Resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 12%; 3 and 4 — 57%; 5 and over — 31%.

PREMIUM GEM (CANNER'S GEM, LITTLE GEM, McLEAN'S GEM) 62-65 days
 Pods: 2½-3" long, straight to slightly curved, medium green, blunt, plump, almost round, borne singly and doubly; contain 6 to 7 peas.
 Peas: Medium large, round, medium dark green, good quality.
 Vines: 20-24" tall, medium green, dense vigorous foliage, hardy, very productive.
 Seed: Medium size, drum shaped, medium green with occasional cream colored berry.

PRIDE 63-65 days
 Pods: 3-3½" long, straight, dark green, plump, blunt, borne mostly doubly, well filled; contain 7 to 9 peas.
 Peas: Medium large, nearly globular, medium dark green.
 Vines: 26-32" tall, dark green, stocky, vigorous, productive.
 Seed: Medium size, roundish, green.
 A canning variety; resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 14%; 3 and 4 — 40%; 5 and over — 46%.

PROFUSION (PRINCE OF WALES) 74-76 days
 Pods: 3-3½" long, straight, pale green, blunt and plump; borne singly and doubly; 5-6 large, elongate berries per pod.
 Peas: Large berries, uniform in size; medium green color with good canning quality.
 Vines: 40-42" tall, medium green, coarse foliage, stout stem.
 Seed: Large, round with coarse dimples; green and cream.
 A medium-late maturing canning and market garden variety, having resistance to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 1%; 3 and 4 — 35%; 5 and over — 64%.

SURPRISE, WILT RESISTANT 58-61 days
 Pods: ½-2" wide, 2½-3" long, straight, light green, plump and blunt, borne singly, mature uniformly; contain 6-8 peas.
 Peas: Medium size, round, light green, excellent quality for early crop, very thin skinned and sweet.
 Vines: 28-32" tall, medium green foliage and slender stem, resembling REGULAR SURPRISE in growth habit, but somewhat more prolific.
 Seed: Medium small, finely wrinkled, round, medium green.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 17%; 3 and 4 — 47%; 5 and over — 36%.

† **THOMAS LAXTON, DARK PODDED** 58-62 days
 Pods: ½-5⁄8" wide, 3¼-3¾" long, straight, dark green, blunt and plump, borne singly; contain 6 to 8 peas.
 Peas: Large, roundish, oval, medium-dark green, very good quality, excellent for canning, freezing and market.
 Vines: 33-38" tall, moderately heavy foliage, dark green.
 Seed: Medium size, green and cream, rounded, dimpled and wrinkled.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 7%; 3 and 4 — 16%; 5 and over — 77%.



CHECKING PEA TRIALS AT MILFORD

† **THOMAS LAXTON, WILT RESISTANT** 63 days

Pods: $3\frac{1}{2}$ - $3\frac{3}{4}$ " long, dark green, blunt, straight, borne singly, and at a lower node than Thomas Laxton; 6-8 medium berries per pod.

Peas: Green, round, slightly darker than regular Thomas Laxton. Excellent quality, suitable for canning and freezing.

Vines: 36-40" tall, dark green foliage borne on medium straw. Internodes slightly shorter than regular Thomas Laxton.

Seed: Large, round, cream and green.

Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 5%; 3 and 4 — 18%; 5 and over — 77%.

† **VICTORY FREEZER** 73 days

Pods: $3\frac{1}{4}$ - $3\frac{1}{2}$ " long, essentially straight, dark green, blunt ended, usually borne doubly and contain 6 to 7 berries.

Peas: Medium-large, almost round berries have dark green interior and good skin color plus excellent quality.

Vines: 30" tall, dark green, vigorous, slender straw.

Seed: Medium size, green, coarsely wrinkled.

A prolific, wilt resistant, midseason variety with medium large berries.

The color and quality of the berries of the variety are best suited to the quick freezing industry.

Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 19%; 3 and 4 — 36%; 5 and over — 45%.

† **WANDO** 70-72 days
 Pods: 3½" long, dark green, borne mostly double.
 Peas: Medium green predominantly 3 to 5 sieve size, about 8 per pod.
 Vines: 24-30" tall, dark green, first blossom at the 12th node.
 Seed: Small, green.
 An excellent market garden and freezing variety where small berry is desired. Very productive under high temperature.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 22%; 3 and 4 — 50%; 5 and over — 28%.

WISCONSIN EARLY SWEET 58-61 days
 Pods: ½-5/8" wide, 2½-3" long, straight, light green, blunt and plump, borne singly, matures uniformly; contain 6-7 peas.
 Peas: Medium size, round, light green; excellent quality with thin skin, firm endosperm and good flavor.
 Vines: 26-30" tall, medium green foliage, with slender stem, plant habit is similar to SURPRISE.
 Seed: Medium size, finely wrinkled, roundish, medium blue green.
 A canning variety.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 16%; 3 and 4 — 45%; 5 and over — 39%.

† **WOODRUFF'S TOPPER** 65-67 days
 Pods: ½" wide, 3½-4" long, dark green, straight, plump, blunt, well filled, borne mostly doubly, set on upper part of vine, giving uniform maturity; contain 6 to 8 peas.
 Peas: Medium large, rounded oval, dark green, excellent flavor, and quality; good variety for canning, freezing or market.
 Vines: 28-32" tall, dark green, heavy stem, heavy foliage.
 Seed: Large, wrinkled green.
 Resistant to fusarium wilt.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 16%; 3 and 4 — 39%; 5 and over — 45%.

† **WYOLA** 66 days
 Pods: 3" long, dark green, 5 to 6 peas to a pod.
 Peas: Dark green.
 Vines: 36-38", dark green, dense foliage.
 Seed: Small, green.
 An excellent, smaller berried, freezing strain.
 Sieve sizes at approximate Tenderometer reading of 100; 1 and 2 — 29%; 3 and 4 — 46%; 5 and over — 25%.

WYOMING WONDER (GIANT STRIDE, NO. 40) 74-76 days
 Pods: ½-5/8" wide, 4½-5" long, straight to curved at tip, dark green pointed, plump, borne singly and doubly, contain 8 to 10 peas.
 Peas: Large, round, dark green, tender, exceptionally fine flavored peas; mostly large sieve sizes.
 Vines: 24-28" tall, dark green, stocky, dense foliage.
 Seed: Large, wrinkled, medium green and cream.
 This variety is wilt-resistant. Preferred by market growers because green calyx makes a very attractive pack.

EDIBLE PODDED VARIETIES

DWARF GRAY SUGAR 64-67 days

Pods: $2\frac{3}{4}$ - $3\frac{1}{4}$ x $\frac{5}{8}$ - $\frac{3}{4}$ " curved, fairly plump, semi-pointed, light green, borne doubly, tender, excellent quality.

Vines: 26-32" tall, very prolific, dark green, slender stemmed, much branched, purple blossoms.

Seed: Small, dimpled, round, mottled reddish gray.

DWARF WHITE SUGAR 64-67 days

Pods: $2\frac{1}{2}$ -3 x $\frac{5}{8}$ - $\frac{3}{4}$ ", straight, to slightly curved, fairly plump, semi-pointed, light green, borne singly and doubly, tender excellent quality.

Vines: 24-30" tall, slender, medium green, branching, productive, white blossomed.

Seed: Small, round, dimpled, creamy white.

MAMMOTH LUSCIOUS SUGAR 71-75 days

Pods: $4\frac{1}{2}$ x $\frac{3}{4}$ - $\frac{7}{8}$ ", straight, light green, blunt, flat, borne singly, good quality.

Vines: 50-57" tall, light green, coarse foliage, fairly vigorous and productive.

Seed: Medium large, round, gray.

MAMMOTH MELTING SUGAR 71-75 days

Pods: 4-5 x $\frac{3}{4}$ - $\frac{7}{8}$ ", mostly straight, light green, flat, blunt to tapered tip, borne singly, minimum amount of strings and fiber, excellent quality, best of edible podded varieties.

Vines: 50-57" tall, light green, coarse foliage, vigorous, productive.

Seed: Medium large, round, smooth, creamy white with yellow endosperm.

P E P P E R

Capsicum frutescens

SWEET VARIETIES

BULLNOSE (LARGE BELL) 55-60 days

Fruits: 3" in diameter, 4" long, blocky, pendant, thick flesh, mild with pungent ribs, dark green becoming scarlet.

Plants: 24-28" tall, prolific, upright.

BURLINGTON, (MOSIAC RESISTANT) 70 days

Fruits: $3\frac{1}{2}$ - $3\frac{3}{4}$ " wide by $3\frac{3}{4}$ - $4\frac{1}{4}$ " long, slightly tapering, mostly 4 lobe, smooth, pendant. Market fruit a lustrous dark green becoming a brilliant scarlet at maturity. Flavor very good, sweet but not insipid.

Plants: $21\frac{1}{2}$ " tall, ascending branches, a little open at top, very vigorous and prolific over a long time. Foliage dense, with large leaves for adequate sun protection. The initial crown set apparently does not inhibit further production.

A Mosaic Resistant variety primarily adapted to the East Coast.

CALIFORNIA WONDER 72-76 days
 Fruits: 3½-4" in diameter, 4-4½" long, very blocky, mostly 4-lobed, upright. Very firm, thick flesh, flavorful and very mild, glossy deep green becoming red at maturity.
 Plants: 22-28" tall, very erect and vigorous, prolific over an extended season.

CALWONDER, EARLY 65-68 days
 Fruits: CALIFORNIA WONDER type, but smaller, uniform, productive.
 Plants: Small CALIFORNIA WONDER type, earlier maturing, suitable for more northern areas. Is rapidly replacing CALIFORNIA WONDER in many areas where environment is not conducive to good yield on CALIFORNIA WONDER.

FLORIDA GIANT 74-78 days
 Fruits: CALIFORNIA WONDER type, but average larger.
 Plants: 24-30" tall, little later than CALIFORNIA WONDER; used in South because of heavy foliage and vigorous growth.



ILLINOIS F-5

ILLINOIS F-5 58-60 days
Fruits: Of the **RUBY KING** type, 3 and 4 lobed. 4½-5" long, 3½-4" wide at stem end. 45 fruits will fill a bushel. Thick walls. Has the best crimson red color we have ever seen. Excellent flesh quality and flavor.
Plant: Compact, heavy foliage. Out-yields **RUBY KING**. Has the quality of bearing fruits continuously under any environmental condition, over a very long season, and the crown set does not inhibit subsequent fruits. This is not recommended for the farther north states such as Michigan and Minnesota. Earliest of large fruited peppers.

KING OF THE NORTH 65-70 days
Fruits: Early **RUBY KING** strain, developed for the North; very similar to **RUBY KING** but smaller fruited and not as pinched and tapered.
Plants: 22-26" tall, erect, very prolific, hardy and vigorous.

LARGE SWEET YELLOW 60 days
Fruits: Shaped like a **BULLNOSE** pepper, but a little wider at the shoulder. About ⅔ the size of **CALWONDER**, the largest sweet yellow pepper.
Thick, bright yellow flesh. Skin golden yellow.
Plants: Similar to **CALIFORNIA WONDER**.

NEAPOLITAN 62-66 days
Fruits: 2-2¼" diameter at shoulder, 3½-4" long, upright, mostly 3-loculed, smooth, glossy, tapered; flesh medium thick, very sweet, crisp, pale yellow green becoming light scarlet.
Plants: 20-25" tall, semi-spreading, branched, very early, prolific.

OAKVIEW WONDER 70 days
Fruits: Blocky, smooth, predominately 4-lobed, very sweet flesh, 4-4½" long by 3½".
Plants: 22" tall, more compact than **CALWONDER**. Fruits set earlier and yield abundantly over a long season. For home and early market garden use.

PENN WONDER 60 days
Fruits: Bell type, thick walls, sweet, medium in size, pendant, three lobed. Easy to pick because of brittle pedicle.
Plants: Medium sized, wide leaves; similar to **CALWONDER** but more fully branched. One of earliest types. In **HARRIS EARLIEST** season but has very good flesh thickness.

PIMIENTO (TRUHART) 71-75 days
Fruits: 2½" diameter, 3½" long, tapering heart shape, smooth glossy skin, pendant, very mild, thick fleshed, ideal for coring, dark green, becoming bright crimson at maturity.
Plants: 28-32" tall, heavy, erect, very productive.

RUBY KING 67-72 days
Fruits: 2½-3" diameter at shoulder, 4½-5" long, pendant, tapered to square end, mostly 3-loculed, smooth with crumpled tips; flesh medium thick to thick, mild and sweet, dark green becoming glossy dark red.
Plants 24-30" tall, vigorous, upright, leafy, productive.

SWEET CHEESE (TOMATO, SQUASH, SUNNYBROOK) 75-80 days

Fruits: $2\frac{1}{2}$ -3" diameter, $1\frac{1}{4}$ " long, upright, oblate with square shoulder, mostly smooth but occasional ridging; flesh medium thick to thick, bright green becoming red, sweet, juicy. Home garden novelty, although often very prolific.

Plants: 23-28" tall, erect, usually productive, branching.

SWEET HUNGARIAN WAX (SWEET BANANA) 65 days

Similar to Hungarian Wax (Hot), except this variety lacks pungency.

WORLDBEATER (RUBY GIANT) 73-78 days

Fruits: $3\frac{1}{4}$ - $3\frac{3}{4}$ " diameter at shoulder, $4\frac{1}{2}$ -5" long, pendant, slight taper with blocky ends; mostly 4-loculed, smooth glossy; flesh medium thick to thick, dark green becoming dark red.

Plants: 26-32" tall, erect, sturdily branched, productive. Selected from cross of RUBY KING and CHINESE GIANT.

WORLDBEATER BLIGHT-RESISTANT 70 days

Fruits: $4\frac{1}{2}$ " long, $3\frac{3}{4}$ " in diameter, mostly 4-lobed, slightly tapered, medium thick walls, attractive green, bright red at maturity.

Plants: 26" tall, uniform, vigorous, upright. Tolerant of some strains of tobacco mosaic.

Popular with Florida growers for fall and winter production.



YOLO WONDER

YOLO WONDER, (MOSIAC RESISTANT) 78-80 days
 Fruits: 3½-4" in diameter, 4-4½" long, predominately 4-lobed, upright.
 Very thick, firm flesh; glossy, attractive green at market stage.
 Plants: 2½" tall, very compact and erect and has longer leaves than
 California Wonder, affording adequate protection against sunscald. Very
 heavy set within plant.
 Yolo Wonder has the ability to produce a higher percentage of fancy fruit
 than the older strain of California Wonder. In the presence of Tobacco
 Mosaic, Yolo Wonder consistently outyields susceptible varieties.
 This variety was selected from the breeding work of the Campbell Soup
 Company.

HOT OR PUNGENT VARIETIES

ANAHEIM CHILI 78-82 days
 Fruits: 1-1½" diameter at shoulder, tapering to point, 6-8" long, nearly
 straight, pendant, flesh thicker than other "hot" varieties, deep green,
 changing to bright scarlet when mature.
 Plants: 20-24" tall, bushy, vigorous, very prolific, leafy.

HUNGARIAN YELLOW WAX 60-65 days
 Fruits: 6" long, 2" thick, tapered smooth, waxy, light yellow, becoming
 red; flesh thick, pungent. Conical in shape.
 Plants: Compact, thrifty, small, highly productive.

LARGE RED CHERRY 80-84 days
 Fruits: Globular to flattened globe shaped, about 1" in diameter, pendant,
 smooth surface, solid, very pungent, glossy dark green changing to
 bright scarlet when mature.
 Plants: 26-29" tall, erect, bushy, medium coarse foliage, very prolific.

LARGE THICK CAYENNE (FINGER) 70-74 days
 Fruits: 1-1½" diameter at shoulder, 6-8" long, inclined to be smooth and
 curved; thicker flesh than LONG NARROW CAYENNE, and not quite as
 pungent.
 Plants: 24-30" tall, erect, leaves are longer and plant more open than LONG
 NARROW CAYENNE.

LONG NARROW CAYENNE 70-74 days
 Fruits: ½-¾" diameter at shoulder, 4-4½" long, very slim, tapering,
 characterized by washboard corrugations below shoulder when mature,
 pendant, very pungent; dark green changing to bright dark red when
 mature.

RED CHILI (RED CLUSTER) 80-84 days
 Fruits: ⅜-1½" diameter, 2-2½" long, smooth, cone shaped, thin fleshed,
 upright, light or yellowish green becoming dark red when mature.
 Plants: 16-20" tall, low spreading bushy growth, exceptionally prolific.
 One of hottest peppers for pickles.

P U M P K I N

Cucurbita spp.

CONNECTICUT FIELD (BIG TOM, JACK O'LANTERN, LARGE

YELLOW) *C. pepo* 112-120 days

Fruits: 10-14" deep x 12-15" in diameter, large, weigh about 20 lbs., smooth, hard, orange surface, somewhat ribbed, flattened globe shape.

Flesh: Thick, orange yellow, coarse, dry and sweet.

GOLDEN CUSHAW (YELLOW CUSHAW, GOLDEN WINTER CROOK-

NECK) *C. moschata* 112-120 days

Fruits: 17-25" long, x 8-9" largest diameter, medium large, bulbous crook-neck, weigh 12-17 lbs., smooth, medium soft, buff color with distinct bloom.

Flesh: Solid in neck, medium thick in bulbous tip, dry yellow, coarse.

GREEN STRIPED CUSHAW *C. moschata* 110-115 days

Fruits: 16-20" long x 8-10" largest diameter, medium large, long curved pyriform shape, weight 12-16 lbs. smooth, medium soft, cream with dark green stripe.

Flesh: Solid in neck, medium thick in bulbous tip, pale yellow, coarse and fibrous, not very dry.

KENTUCKY FIELD *C. moschata* 120 days

Fruits: Medium sized 10 x 12", weigh 15 lbs.

Rind: Thick, tough, smooth, ribbed, and a dusty yellow color.

Flesh: Moderately thin, coarse, fibrous, light orange, and is excellent for canning. Also used for feeding stock. Plants are prolific.

KING OF THE MAMMOTHS (POTIRON, JUMBO, MAMMOTH CHILI

SQUASH) *C. maxima* 115-120 days

Fruits: Largest of all *Cucurbita* spp., 18-24" long x 15-18" in diameter, weigh 35-50 lbs., often larger, fairly smooth, wide but shallow ribbing, soft dull orange, streaked or splotched with buff.

Flesh: Thick, variable yellow to orange, coarse, moist, partially fibrous, only fair quality.

LARGE CHEESE *C. moschata* 108-112 days

Fruits: Very flat, 6-7" deep x 12-15" diameter, heavy ribbing, dull orange surface with heavy bloom, weigh 12-15 lbs., hard shell.

Flesh: Dull orange yellow, very thick, has very little fiber, good flavor.

SMALL SUGAR (NEW ENGLAND PIE, EARLY SUGAR) *C. pepo* . 115-118 days

Fruits: Flattened globe, 8-9" deep x 10-12" diameter, moderately ribbed, dark orange, glossy, hard surface, productive, weight 6-8 lbs.

Flesh: Orange yellow, thick, fine textured, dry, sweet, excellent quality.

RADISH

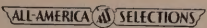
Raphanus sativus

EARLY VARIETIES

- CAVALIER** 20-22 days
Roots: $\frac{1}{2}$ x $\frac{3}{4}$ " , oval or olive shape, very uniform, bright scarlet skin, tender white flesh.
Tops: Short, very uniform; ideal for forcing or early market.



CHERRY BELLE

- CHERRY BELLE**  Bronze Medal 1947 21 days
Roots: Saxa type though a trifle lighter in color; will stay solid longer and does not crack as does SAXA.
Tops: Similar to SAXA in length but distinct in foliage characters. Not recommended for early spring out-door planting. Unexcelled for greenhouse or hot-bed forcing. Excellent for late spring or early fall planting on all types of soil.

CINCINNATI MARKET (LONG SCARLET SHORT TOP) 28-30 days
Roots: $\frac{5}{8}$ - $\frac{7}{8}$ x 6-7", long, slender, cylindrical, with tapering tips, fairly smooth, deep carmine; flesh white, crisp, tender.
Tops: Medium.

CRIMSON GIANT 28-30 days
Roots: 1-1 $\frac{1}{2}$ " in diameter, rounded-turnip to flattened globe shape, bright crimson; flesh crisp and tender over long period.
Tops: Medium large.

FRENCH BREAKFAST 24-27 days
Roots: $\frac{1}{2}$ - $\frac{5}{8}$ x 1 $\frac{1}{4}$ -1 $\frac{3}{4}$ ", short, cylindrical, stump rooted, bright scarlet with white tip; flesh crisp and tender; popular for forcing.
Tops: Short and uniform.

LONG BRIGHTEST SCARLET (CARDINAL) 26-29 days
Roots: Earliest long forcing type; $\frac{5}{8}$ - $\frac{7}{8}$ x 4-5", long tapering; clear scarlet skin, with touch of white at tip; crisp, tender, white flesh; stands well.
Tops: Medium.

SAXA (RAPID RED) 21-23 days
Roots: Choice forcing variety, $\frac{1}{2}$ - $\frac{5}{8}$ " diameter; globe shaped, bright scarlet skin; very tender white flesh.
Tops: Short, making it ideal for forcing.

SCARLET GLOBE, MEDIUM TOP 23-26 days
Roots: $\frac{1}{2}$ - $\frac{5}{8}$ x $\frac{5}{8}$ - $\frac{3}{4}$ ", thick, olive shape; ideal outdoor radish; intense scarlet skin and crisp white flesh.
Tops: Medium, very uniform, giving attractive bunches.
Should not use for summer planting because tops are too tall. Use **SHORT TOP SCARLET GLOBE**.

SCARLET GLOBE, SHORT TOP 23-26 days
Roots: Same as **MEDIUM TOP** strain.
Tops: Short, for forcing. This is **SCARLET GLOBE** root with **SAXA** top.

★**SCARLET GLOBE (SPECIAL SHORT TOP FORCING STRAIN)** . . . 21 days
Roots: $\frac{1}{2}$ - $\frac{5}{8}$ " in diameter, true globe shape, tender white flesh; very refined tap root, brilliant scarlet skin. Very similar to **Saxa** but free of basal splitting.
Tops: As short as **Cherry Belle** but has a greater number of leaves under spring forcing conditions for easy bunching. This variety has been selected to supplement **Cherry Belle**, particularly for early spring plantings.

SPARKLER WHITE TIP (EARLY SCARLET TURNIP WHITE TIP) . 25-28 days
Roots: $\frac{1}{2}$ - $\frac{5}{8}$ " diameter, globe to short top shape, scarlet skin with bottom third clear white; crisp white flesh.
Tops: Small to medium.

WHITE STRASBURG 35-40 days
 Roots: Attractive white summer variety; $\frac{5}{8}$ - $\frac{7}{8}$ x 5-6", similar to ICICLE but thicker, larger, and much later. Sometimes used as a winter radish.
 Tops: Medium, much larger than ICICLE and other bunching varieties.

WHITE ICICLE 27-30 days
 Roots: $\frac{1}{2}$ - $\frac{3}{4}$ x 6-7", long, cylindrical to long tapering, snowy white; flesh clear white and brittle.
 Tops: Medium.



WOODRUFF'S BEAUTY

★**WOODRUFF'S BEAUTY** 21-23 days
 Roots: Very choice selection of SCARLET GLOBE type; exceptional uniformity; best early radish at present.
 Tops: Short, uniform, excellent early market radish.

LATE OR WINTER VARIETIES

CELESTIAL (CHINESE WHITE WINTER, CALIFORNIA MAMMOTH WHITE) 57-62 days
 Roots: $2\frac{1}{2}$ -3 x 8-10", long cylindrical, square shoulder, and blunt tip with tendency to bulge in midsection; creamy white skin, with crisp, solid, snowy white, mildly pungent flesh.
 Tops: Very large, coarse, cut leaf.

CHINA ROSE WINTER (SCARLET CHINA) 50-54 days
 Roots: 2 x 7-8" slightly pyriform, blunt, smooth, bright rose, flesh white and pungent.
 Tops: Large, coarse.

LONG BLACK SPANISH 55-60 days
 Roots: Long winter type; 2-2½ x 7-10"; long cylindrical with tapered tips; skin black and roughened; flesh white, pungent, crisp and solid.
 Tops: Very large, coarse, cut leaf.

ROUND BLACK SPANISH 53-58 days
 Roots: Choice winter type; 4-5" in diameter, globular to thick shape, with small to medium tap root; jet black, fairly smooth skin, flesh snowy white, crisp, pungent.
 Tops: Large, coarse, cut leaf.

SALSIFY (VEGETABLE OYSTER)

Tragopogon porrifolius

MAMMOTH SANDWICH ISLAND 150-180 days
 Commonly cultivated variety; slow growing, hardy; long tapering fleshy roots, creamy white; stores well. Used in soups, giving flavor similar to oysters.

SPINACH

Spinacia oleracea

(p.s. means "prickly seeded"; r.s. means "round seeded.")



AMERICA SPINACH

- † AMERICA

r.s. 45-50 days

Plants: Compact, slightly spreading, vigorous grower. Very slow in producing seed stalks and will remain marketable under high temperatures for a week longer than Bloomsdale Long Standing.

Leaves: Thick, glossy; very dark green, large blade superficially broad oval to round in outline because of reflexed and rolled habit, distinctly savoyed and crumpled for successful marketing; excellent quality.

Recommended for home use and for the market gardener, catering to the pre-package trade.
- BLOOMSDALE EXTRA DARK GREEN

r.s. 39-42 days

A special and extra dark green strain of BLOOMSDALE Spinach. It resembles RESELECTED BLOOMSDALE, but it is more uniform and will stand longer, besides having a darker color.
- † BLOOMSDALE LONG STANDING

r.s. 42-45 days

Plants: Erect, compact, vigorous grower, bolts 10-14 days later than regular BLOOMSDALE RESELECTED.

Leaves: Thick, glossy, dark green, medium large, heavily savoyed and crumpled, rounded, incurved tip, tender, good quality.
- BLOOMSDALE RESELECTED

r.s. 39-42 days

Plants: Erect, compact, vigorous, bolts 2-4 days later than VIRGINIA BLIGHT RESISTANT SAVOY, fast growing early in spring.

Leaves: Medium thick, glossy dark green, medium size; less savoyed than BLOOMSDALE LONG STANDING; lanceolate leaves appearing oval because of incurved edges, moderately tender, good quality.
- DOMINO

r.s. 36-40 days

A yellows resistant variety developed at the Virginia Truck Experiment Station by the late Dr. H. H. Zimmerly, the result of a cross between OLD DOMINION and NOBEL.

Plants: Large, flat growing, with well filled center. Grows rapidly, bolts early. Does best as a fall crop.

Leaves: Long, broad and thick, with rounded to pointed tip. Slightly curved. Not as heavily savoyed as either VIRGINIA SAVOY or OLD DOMINION.
- † HEAVY PACK (VIKING, NORTHLAND)

r.s. 44-46 days

Plants: Very vigorous, very large and spreading, but not flat, very slow bolting; leading canning variety because of heavy yield.

Leaves: Very large, broad, arrow shaped with rounded tip, thickest of all large leaved varieties, dark green, partially crumpled.
- ★† HICURL SAVOY

r.s. 46-48 days

Plants: Very erect, medium long petioled type selected to keep foliage clear of ground under all conditions. Compact and dense in center. This variety has been selected for ability to remain free of bolters for a longer time than LONG STANDING BLOOMSDALE.

Leaves: Thicker than BLOOMSDALE. Large, very dark glossy green. Heavy blister savoy, rounded recurved tips, good quality.

The very long standing HICURL SAVOY Spinach is an improvement over LONG STANDING BLOOMSDALE because of more erect habit, high cutting position for mechanical harvesting, and clean dirt-free leaves for the market gardener and canner.

HOLLANDIA (PRICKLY WINTER) p.s. 43-46 days
 Plants: Almost flat, spreading, vigorous, open habit, bolts earlier than most long standing types.
 Leaves: Thin to medium thick, medium to dark green, large, broad, arrow shaped, smooth to slightly crumpled, pointed tip, tender, good quality. Used chiefly in Far West for canning and freezing.

KING OF DENMARK (ANTVORSKOF) r.s. 45-48 days
 Plants: Very large, open, spreading and flat, slowest bolting of all varieties.
 Leaves: Medium sized, arrow shaped leaves with rounded tips on very long petioles, very dark glossy green, smooth, thick and tender.

NEW ZEALAND (EVERBEARING) *Tetragonia expansa*.
 Not a true spinach. Large, much branched, spreading plant produces succession of small, very thick and fleshy, pointed leaves on round, fleshy stems. Leaves and tips of branches are picked for cooking like Spinach. Vigorous grower and especially heat and drought tolerant. Seeds are large, horned, chocolate brown, slow germinating.



SECTION OF SPINACH TRIALS, MILFORD, CONN.

† **NOBEL GIANT LEAVED (GIANT THICK LEAVED)** r.s. . . . 45-48 days

ALL-AMERICA SELECTIONS Silver Medal 1933

Plants: Semi-erect to flat, spreading, hardy, vigorous growth, more productive than **HOLLANDIA** and also slower bolting.

Leaves: Medium thick, medium green, very large, broad, smooth with slight crumpling, tapered to rounded tip, good quality. Best of large smooth leaved type. Similar varieties are **GAUDRY**, **GIANT FILLBASKET**, and **MATADOR**.

OLD DOMINION r.s. 40-42 days

Plants: Semi-erect, loose, not as heavy leaved as **BLOOMSDALE LONG STANDING**, rapid grower in early spring; slower bolting than regular **BLOOMSDALE SAVOY**, but not as long standing as **LONG STANDING BLOOMSDALE**. Very resistant to cold and used mostly for fall planting. Yellows resistant. Leaves: Medium thick, dark green, moderately crumpled, medium broad, tapering to point, tender, good quality.

† **SUMMER SAVOY** r.s. 42-45 days

A new and better strain of **LONG STANDING BLOOMSDALE** or **SAVOY**. It has a darker green color, greater uniformity of plant growth and will stand several days longer without bolting to seed.

† **TROUBADOUR** r.s. 45-48 days

Plant: Medium compact, spreading. Vigorous, long standing, with low cutting height. Leaves: Dark, glossy green with shortened petioles; outer leaves smooth surfaced; large, thick fleshed blade. Inner leaves partially savoyed. An easily cleaned, heavy yielding, long standing shipping variety with enough savoy in leaf to prevent heating in the container.

† **VIRGINIA BLIGHT RESISTANT (BLOOMSDALE BLIGHT RESISTANT)** r.s. 36-40 days

Plants: Erect: fairly compact, sparser leaved than **LONG STANDING BLOOMSDALE**, very rapidly maturing spring strain, resistant to cold; used for fall planting. Leaves: Medium thick, medium dark green, moderately crumpled, medium broad, tapering to rounded point. Yellows resistant.

VIROFLAY, (ROUND THICK LEAF MONSTROUS VIROFLAY, ARAGON) r.s. 43-46 days

Plants: Spreading, flat, large, fast growing, quick bolting. Leaves: Medium thick to thick, medium green, large, broad, arrow shaped, young leaves partially crumpled becoming smooth with age, fairly tender. Used in West and Southwest for early market and to a limited extent for canning.

† **FREEZING VARIETY**

SQUASH

Cucurbita spp.

BUSH OR SUMMER VARIETIES

BENNING GREEN TINTED SCALLOP 52-56 days

Fruits: Same as EARLY WHITE BUSH SCALLOP, but pale-green tinted when young, becoming pale buff at mature seed stage.

Flesh: Green tinted white, tender, juicy.

BLACK ZUCCHINI 60-64 days

Fruits: 10-12" long x 3-3½" in diameter, cylindrical with square ends, ridged at stem end, similar in type to COCOZELLE, but dark greenish-black color over all.

Flesh: Greenish white, well flavored.

† **CASERTA** ALL-AMERICA SELECTIONS Gold Medal 1949 50 days

Fruits: 6-7" long by 1-1¼" thick at the market stage; light, glossy green with broken stripes of dark green. In the market it retains fresh appearance after picking.

Plant: Bush type. 30 fruits per plant are not unusual. Its deeply cut leaves make it resistant to wind damage.

Developed by Dr. L. C. Curtis and introduced by F. H. Woodruff & Sons, Inc. This is of the COCOZELLE type but is earlier and much more prolific.



COCOZELLE VEGETABLE MARROW

† FREEZING VARIETY

† **COCOZELLE VEGETABLE MARROW (ITALIAN VEGETABLE MARROW, COCOZELLA DI NAPOLI)** 60-64 days
 Fruits: 14-18" long x 3½-4½" in diameter, long cylindrical, straight prominent ridges at stem end, alternately striped dark and light green in edible stage, becoming dark green and dull yellow at maturity.
 Flesh: Tender, juicy, fine flavored, white in edible stage.

CONNECTICUT STRAIGHTNECK, LEMON COLOR 50-54 days
ALL-AMERICA SELECTIONS Honorable Mention 1939
 Fruits: 8-10" long x 2½-3" apical diameter, straight sided, tapering slightly toward stem end, square tip with prominent blossom scar, moderately warted, pale or lemon yellow color in edible stage, occasionally green tinged, becomes medium yellow in mature seed stage. While not as prolific as **EARLY PROLIFIC STRAIGHTNECK**, this variety yields more pounds of early fruit. Being a massed-inbred variety, the plants are smaller and can be planted closer than other bush types. Developed by L. C. Curtis of the Connecticut Agricultural Experiment Station.
 Flesh: Creamy yellow, tender, flavorful.



EARLY PROLIFIC STRAIGHTNECK

† **EARLY PROLIFIC STRAIGHTNECK** 51-55 days
ALL-AMERICA SELECTIONS Silver Medal 1938
 Fruits: Inbred strain of **GIANT STRAIGHTNECK** and, like **CONNECTICUT STRAIGHTNECK**, small plant, permitting thicker stand. 8-10" long x 2-2½", largest diameter, straight and slender, with rounded or abruptly tapered tip, smooth or sparsely warted; light yellow in edible stage becoming deep golden yellow in mature seed stage.
 Flesh: Creamy yellow, excellent quality, firm.

EARLY SUMMER CROOKNECK 52-56 days
Fruits: 8-10" long x 2½-3" largest diameter, long slim-pear shaped with curved neck, heavily warted, medium yellow in edible stage becoming dark or orange-yellow when mature for seed.

EARLY WHITE BUSH SCALLOP (PATTY PAN) 52-56 days
Fruits: 2½-3" deep x 5-7" in diameter in edible stage, disk or flared-bowl shape with prominent ribbing on edge of flare which gives scalloped appearance; creamy white in edible stage becoming chalky white at mature seed stage.
Flesh: Green tinged white, tender, juicy.

EARLY YELLOW BUSH SCALLOP (YELLOW PATTY PAN) 52-56 days
Fruits: Same as EARLY WHITE BUSH SCALLOP but light to medium yellow in edible stage, becoming dull, golden yellow in mature seed stage.
Flesh: Creamy white, tender, juicy.

GRAY ZUCCHINI 60 days
Fruits: Nearly cylindrical, straight, 18" long 4" diameter, medium green, with grayish mottling.
Flesh: Firm, good flavor.

GIANT SUMMER CROOKNECK 59-65 days
Fruits: Larger fruited and later than EARLY SUMMER CROOKNECK but the same type; 9-12" long x 3-3½" largest diameter at edible stage, becoming much larger at maturity.
Flesh: Same as EARLY SUMMER CROOKNECK.

GIANT SUMMER STRAIGHTNECK 59-65 days
Fruits: Same type as GIANT SUMMER CROOKNECK but 85-90% of fruits are straight instead of curved, making more desirable market type for some sections.
Flesh: Same as EARLY SUMMER CROOKNECK.

MAMMOTH WHITE BUSH SCALLOP 56-60 days
Fruits: Same as EARLY WHITE BUSH SCALLOP but later and larger.
Flesh: Same as EARLY WHITE BUSH SCALLOP.

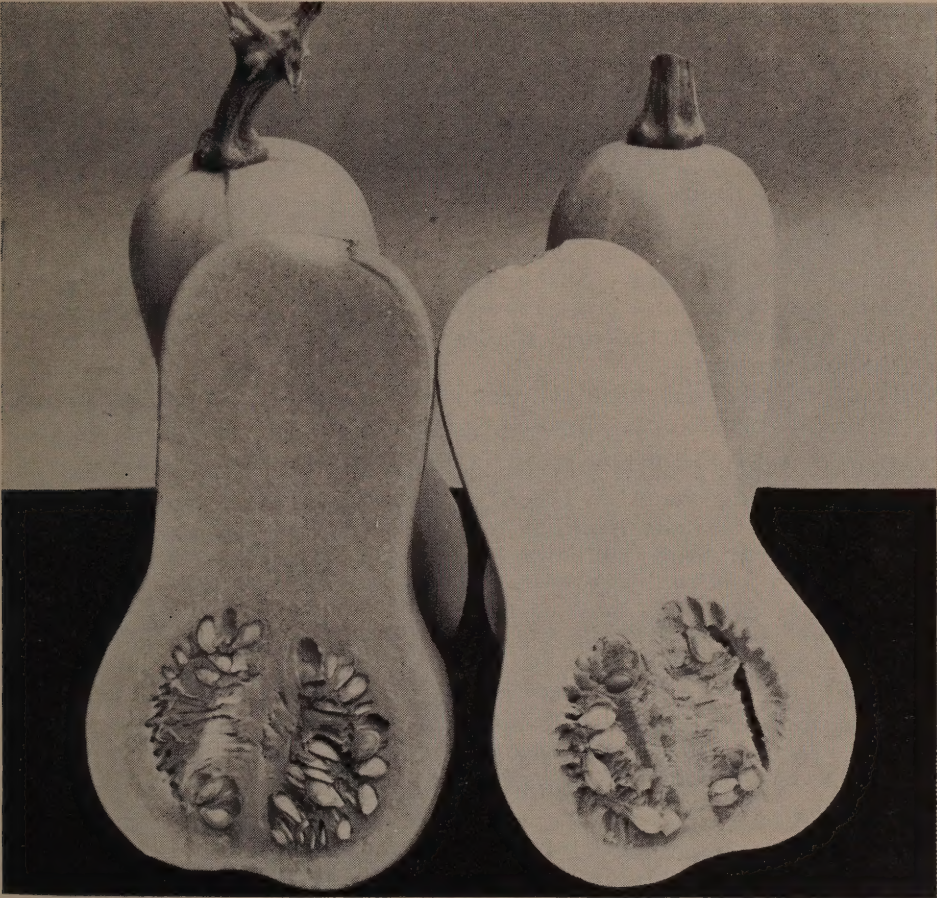
WOOD'S PROLIFIC 52-56 days
Fruits: Selection of EARLY WHITE BUSH SCALLOP of same general plant habit and fruit type. Selection made for deeper fruit and absence of ribbing on flange, giving fairly smooth, deep-bowl shape.
Flesh: Same as EARLY WHITE BUSH SCALLOP.

WINTER OR VINING TYPES

† **BLUE HUBBARD** 110-120 days
Fruits: 15-18" long, 9-12" largest diameter, bulged fusiform or cigar-shaped with symmetrical taper on both ends, weigh 12-18 lbs., slatey blue, skin very hard, thick and coarsely warted with irregular ribbing.
Flesh: Thick to very thick, dull orange, fine textured, moderately dry and sweet, good flavor and quality.
A choice variety for New England.

BOSTON MARROW 97-100 days
 Fruits: 12-15" long, 9-12" diameter; similar to HUBBARD in size and shape, weigh 7-9 lbs., hard, rough, dull orange skin.
 Flesh: Thick, orange-tinged golden, moist, fine grained, sweet.

BUTTERCUP 100 days
 Fruits: 6-8" in diameter, medium small, 3-4 lbs., shaped like a turban, slightly ribbed, dark green, faintly striped, slight mottling. Thin rough rind.
 Flesh: Deep yellow to orange, dry, sweet, fine grained, excellent flavor. Developed by Dr. Yeager of North Dakota Agricultural College. It is highly productive and keeps well.



BUTTERNUT SQUASH

† **BUTTERNUT (THICK NECK STRAIN)** 95-102 days
 Fruits: 9-11" long, 4-5" in largest diameter, nearly cylindrical with slightly bulbous base, dull pale orange, weigh 2½-4 lbs., skin smooth and hard.
 Flesh: Very thick, seed cavity only in bulbous end, very dry, brilliant orange flesh, excellent flavor and quality, ideal home garden baking type. Very popular in the East.
 This strain is the result of careful inbreeding for a straight thicker-necked strain, suitable for the most critical market garden and shipping trade.

- † **GOLDEN DELICIOUS** 100-105 days
Fruits: 10-12" long 8-10" diameter, top shaped, bright reddish or tangerine orange with occasional green splotches at blossom end; weigh 6-9 lbs.; skin hard and smooth.
Flesh: Thick, deep orange, medium grained, dry with high starch content, excellent flavor; widely used for canning and freezing.
- † **GOLDEN HUBBARD (RED HUBBARD)** 98-103 days
Fruits: 10-12" long, 7-9" diameter, typical HUBBARD shape with symmetrical "neck" on both ends, weigh 8-10 lbs.; skin hard, covered with large shallow warts, reddish orange skin with grayed stripes at blossom end.
Flesh: Thick, deep orange yellow, fine grained, dry; excellent quality for canning and freezing.
- † **GREEN DELICIOUS** 100-105 days
Fruits: Same as GOLDEN DELICIOUS except for skin color, which is very dark green with thin, light green stripe at blossom end.
Flesh: Same as GOLDEN DELICIOUS, but color is not as intense an orange. Excellent keeper.
- IMPROVED HUBBARD (GREEN HUBBARD)** 105-115 days
Fruits. 12-15" long, 8-10" largest diameter, globular with taper at both ends, weigh 9-12 lbs.; dark ivy green frequently striped at tip with paler green, becomes bronzy green at maturity or during storage; skin very hard and thick, broad shallow irregular ribbing with moderately shallow warting.
Flesh: Medium thick to thick, deep yellow, dry, very fine grained, sweet, crisp and tender, well flavored, good quality.
- MAMMOTH TABLE QUEEN (ROYAL ACORN)** 90-100 days
Fruits: 7-8" long, 5-5½" in largest diameter, weigh 2-3 lbs., large fruited strain of Table Queen which is similar in shape and color.
Flesh: Medium thick, pale orange, tender, dry, sweet, flavorful; good keeper.
- † **TABLE QUEEN (DES MOINES, ACORN, YAMA)** 90-100 days
Fruits: 5-6" long, 4-4½" largest diameter, weigh 1-1½ lbs., acorn shape with prominent ribbing, very dark greenish black; smooth, fairly thin skin.
Flesh: Thin, pale orange to deep yellow, tender, fairly dry and sweet with good flavor. Old variety, popular as individual baker; keeps fairly well.
- WARREN TURBAN** 115-125 days
Fruits: 8-10" long, 12-15" in diameter, weigh 14-20 lbs., drum shaped with distinct navel at blossom scar, bright reddish orange with scattered grayish striping at blossom end, navel is slatey blue; shell very hard, thick and heavily warted with fine warting.
Flesh: Thick at sides and blossom end, very thick at stem end, bright orange, brittle, sweet, fairly dry, good flavor and quality.
- † **WARTED HUBBARD (CHICAGO WARTED HUBBARD)** 110-120 days
Fruits: 12-14" long, 10-12" largest diameter, weigh 12-15 lbs., large fruited IMPROVED HUBBARD with heavy warting.
Flesh: Same as IMPROVED HUBBARD.

TOMATO

Lycopersicon esculentum

RED FRUITED or YELLOW SKINNED, RED FLESHED VARIETIES

BONNY BEST 64-74 days

Fruits: Bright scarlet, medium size, average $4\frac{1}{2}$ - $5\frac{1}{2}$ oz., smooth, flattened globe with index about 0.75, small cored, solid flesh, free from circular cracking, although radial cracks are occasionally found; 5-7 locules.

Vines: Medium sized plants, medium amount of semi-erect and spreading foliage, giving fair coverage to fruit, medium green, productive.

BOUNTY 60-70 days

Fruits: Scarlet, medium small, average $4\frac{1}{2}$ - $4\frac{3}{4}$ oz., smooth, uniformly globular, with index about 1.00, shallow, small core, cracks under extreme variations of dry and wet weather, 4-5 locules; carries uniform ripening gene and consequently has no dark green color around stem.

Vines: Very small, determinate, fair foliage, although poor coverage over prolific set. Of same parentage as VICTOR but not identical; developed by Dr. A. F. Yeager and Mr. Harold Mattson of the North Dakota Agricultural Experiment Station.

BREAK O'DAY 62-72 days

Fruits: Orange-red, medium large, average $5\frac{1}{2}$ - $6\frac{1}{2}$ oz., smooth, irregularly globe shaped with index about 0.95; medium large core, fairly fleshy, only radial cracking and that very rarely, 4-6 locules, slow ripening and sun-scalding of stem ends are handicaps of this variety.

Vines: Medium large plant, coarse, medium dense foliage, open and spreading giving poor coverage. Early market strain because of wilt and nail-head resistance, earliness and freedom from cracking.

CENTURY 76-79 days

Fruits: Deep scarlet, ripening from inside out, uniformly globe shaped. Thick, meaty, outer walls, heavy cross walls and attractive "jelly"; free from cracks. Medium sized fruits, average about 5 ounces each and holds its size well throughout the season.

Plants: Indeterminate and spreading foliage is intermediate in density, heavier than most early varieties but lighter than Rutgers.

The firmness of the fruit of Century makes it excellent for use as a long distance shipper as well as for use as a local market variety.

CRIMSON CUSHION (BEEFSTEAK, ENORMOUS, RED PONDEROSA)

90-100 days

Fruits: Same characteristics as PONDEROSA but scarlet color; usually less irregular in shape.

Vines: Same as PONDEROSA.

- EARLIANA** 60-69 days
 Fruits: Scarlet, medium size, average $4\frac{1}{2}$ - $5\frac{1}{2}$ oz., usually smooth, distinct oblate with index about 0.68, irregular and variable, medium core, fairly fleshy, very susceptible to concentric ringing and moderate amount of radial cracking, 9-12 irregular locules.
 Vines: Small to medium plant, sprawling and open, with sparse to medium foliage, light green, prolific.
- FIRESTEEL** 60-70 days
 Fruits: Scarlet red, medium size, average $4\frac{3}{4}$ - $5\frac{1}{2}$ oz., smooth, almost globular, with index about 0.90, small core, very firm and fleshy practically no cracking, very uniform type, 4-5 locules.
 Vines: Small to medium plant, fairly dense foliage giving fair coverage during early part of season when most of crop is matured, prolific.
- GARDEN STATE** 80 days
 Fruits: Scarlet red, deep flat shape, thick walled, mild flavor. It has excellent quality and ripens uniformly.
 Vines: Vigorous, compact, upright, partially resistant to late blight and fusarium wilt. Developed by Campbell Soup Company, popular as a processing tomato.
- GENEVA SEVEN** 65-75 days
 Fruits: Medium size, approximately 5 ounces, slightly flattened globe, no ribbing, very small blossom and stem scars, uniformly ripening to a good medium red, thick walls and small core.
 Vine: Medium to small, determinate, 4-5 foot spread. Plants require high fertility to respond to close economical planting. An early maturing variety with a heavy set at the crown and a rather large number of fruits per cluster. Valuable to a market gardener requiring a medium sized fruit or a canner interested in extending the packing season.
- GREATER BALTIMORE, INDIANA STRAIN (INDIANA BALTIMORE)** 73-83 days
 Fruits: Deep scarlet red in color, medium large to large, average $6\frac{7}{8}$ oz., moderately flattened globe with many fruits elliptical in cross section, index about 0.80; shallow, hard core immediately below stem; fruit usually multi-loculed or developing locules in central portion of fruit under stem, solid flesh and firm fruit, free from circular cracks, but an occasional radial crack; 6-9 locules; one of leading canning varieties.
 Vines: Large, bushy, branching close to the ground, foliage large and vigorous and covers the fruit to lessen amount of sunscald in the Middle West.
- GROTHEN'S GLOBE** 66-75 days
 Fruits: Deep scarlet, medium large, average 6-7 oz., smooth, globular, with index about 0.85, medium large pulpy core, solid and firm fleshed, free from cracking; 6-8 locules. Greatly improved BREAK O'DAY type.
 Vines: Large, vigorous, spreading, similar to BREAK O'DAY but coarser, denser foliage, affording protection from sun scald, dark green leaves; productive.

GROTHEN'S GLOBE, WILT RESISTANT 68 days
Similar in essential characters to the susceptible Grothen's Globe, but has been selected for resistance to Fusarium Wilt.
An important green wrap variety for Texas and Florida.

IMPROVED PEARSON "C" 85 days
Fruits: Large, smooth, semiglobe, and bright red in color.
Vines: Prolific, self-topping. An improvement of the original PEARSON developed at the College of Agriculture, California. Popular for canning.

HOMESTEAD, (WILT RESISTANT) 80 days
Fruits: Comparable to Rutgers, very good dark red, medium large, averaging five ounces; subglobe to oblate in shape, firmer than Rutgers when ripened from green wrap harvest; free of internal browning and puffiness.
Vine: Semi-determinate, coarse foliage, sturdy vine, productive.
Homestead has the Pan America grade of near-immunity to Wilt. It was primarily bred as a shipping variety but also valuable for home garden.
This variety was bred at the Southeastern Regional Laboratory, U.S.D.A. Charleston, S. C.

JOHN BAER 64-74 days
Almost identical with BONNY BEST. Under some environments the foliage is denser, a little darker green and slightly heavier stemmed.

★**LAKELAND** 65-70 days
Fruits: Globe or slightly flattened globe, first fruits average about 6 oz., later ones 4-5 oz., seed cells medium to large, thick cell and exterior walls (good for green-wrap). Small stem scar, small to medium blossom scar. Free from radial and practically free from circumferential cracking. A heavy producer.
Vines: Medium size, vigorous, fair to good coverage. Fruits bleach just before ripening, indicating readiness for picking for green-wrap. Slightly less susceptible than RUTGERS to fusarium and mosaic. Sets well in wet or dry growing season, but does not do well in a wet harvest season.

LONGRED (GENEVA NO. 5) 75-85 days
Fruits: Solid, heavy, 6-8 oz., globular, to deep globular, smooth, small scar, and shallow basin at stem end. Thick walls, central mass solid with red color.
Plants: Medium, with spread of 4-5½ feet, many branches. Small to medium leaves but abundant and remain in good condition late in the season. Adapted to northern New York and Canada.

MANASOTA, (WILT RESISTANT) 70 days
Fruits: Medium-red, with green shoulder at green wrap maturity. Deep oblate, deeper than Rutgers; smooth, tapering slightly towards stem end with good shoulder and basin, small blossom scar, free of cracks, 5 to 7 locules.
Vine: Large, very vigorous, erect, compact bush when young, but opens when fruit ripens to hasten maturity. Leaves large, coarse.
A green-wrap variety for the winter season in the south. Fruits abundantly under southern conditions and plants are resistant to Fusarium Wilt and tolerant of Stemphyllium Blight.

MANALUCIE, (WILT RESISTANT) 85 days

Fruit: Deep scarlet, medium large fruit 5-6 ounces; prolate, smooth shoulder, small stem scar, shallow basin and small blossom scar. Free of radial and concentric cracks, firm textured flesh, 5-6 small sparsely seeded locules with thick inter-locular and peripheral wall, small core and few fibers. Fruit has a heavy cuticular wax, giving an attractive appearance.

Manalucie is very easily harvested at "green-wrap" maturity, but difficult to pick when mature. It is slow maturing and must be harvested in mature green-wrap stage or preferably in "early pink" stage for fullest flavor and shipping quality.

Vine: Partially erect; large strong branches, indeterminate. The large, dark green leaves furnish adequate shade to minimize sun scald, but are not dense enough to interfere with adequate spray program. Manalucie is very productive and is an aggressive feeder, producing its most efficient yields with about 75% of fertilizer required for standard varieties. Yields are clearly superior to Grothen's Globe in Florida under conditions favoring maximum yields of Grothen's Globe. Manalucie is considered best as a spring crop, but will produce high yields of sizable fruits under cool weather conditions.

Manalucie possesses the largest array of genetic disease resistances available to date in a tomato variety producing fruits of acceptable size and high quality.

Manalucie is inherently resistant to the following diseases:

DISEASE	AGENT
Fusarium Wilt	— <i>F. oxysporum</i> f. <i>lycopersici</i>
Grey Leaf Spot	— <i>Stemphyllium solani</i>
Early Blight	— <i>Alternaria solani</i>
Sore Shank	— " "
Collar Rot	— " "
Leaf Mold	— <i>Cladisporium fulvum</i> 4 races

Mildly resistant to:

Black Spot (stem canker phase)	— <i>Phoma destructiva</i>
Nematode	— <i>Meloidogyne</i> spp.
Blossom End Rot	— Physiological origin
Crease Stem	— Over-fertilization

This new variety was developed by Dr. James Walter and David Kelbert at the Gulf Coast Experiment Station at Bradenton, Florida.

MARGLOBE 70-80 days

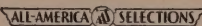
Fruits: Deep scarlet, medium, large, average 6-7 oz., smooth, slightly oblate or almost globular, with index about 0.87, medium large pulpy core, very solid, free from circular cracking and radial cracks rarely found; 6-8 locules.

Vines: Large plants, vigorous, erect and bushy foliage, giving good coverage to fruits, medium green, productive. Resistant to fusarium wilt.

PAN AMERICA 67-75 days

Fruits: Bright scarlet, medium large, average 6-7 oz., smooth, globular to deep oblate with index about 0.86, small core, moderately thick flesh, very thick outer wall, almost free of cracking, 5-8 locules.

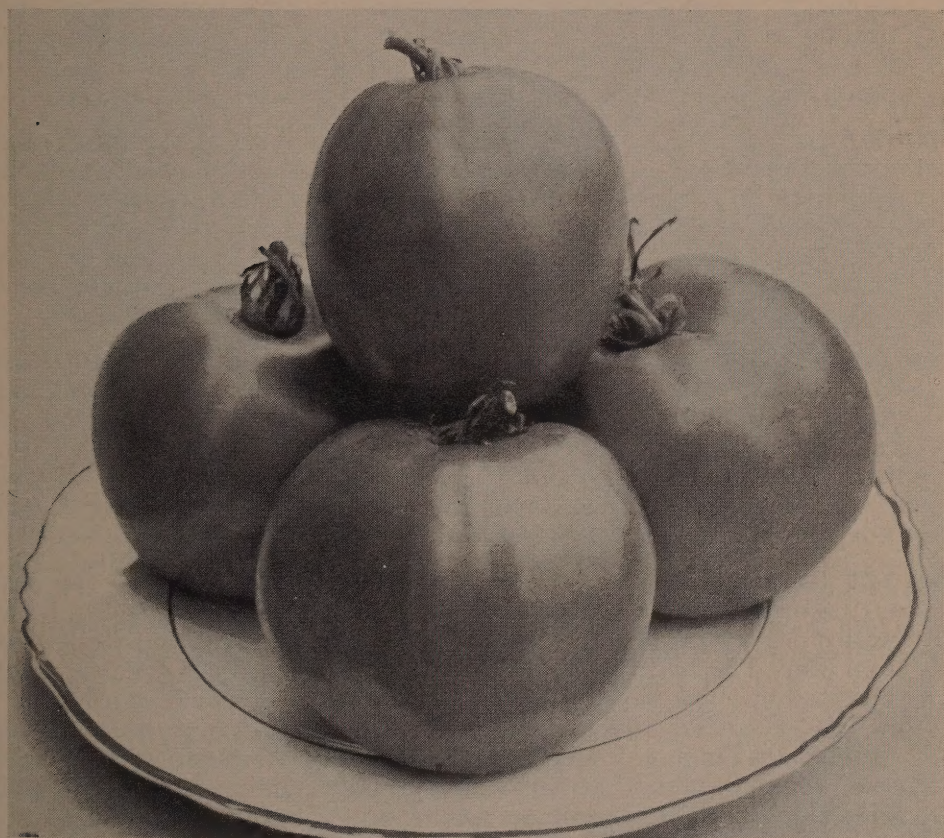
Vines: Similar to MARGLOBE but smaller leaved. Good coverage of medium dark green leaves. Developed by W. S. Porte of U.S.D.A. for high resistance to nailhead rust and moderate resistance to wilt.

PRITCHARD (SCARLET TOPPER)  Gold Medal 1933

67-76 days

Fruits: Medium scarlet, medium size, average 5-6 oz., smooth, almost globular and characteristically show prominent shoulder; index about 0.85, medium sized pulpy core, solid, free from cracking, milder flavor than MARGLOBE; 5-7 locules.

Vines: Distinctly bushy because of self-pruning or self-topping character; heavy stem and coarser foliage than MARGLOBE, medium dark green leaves, very productive.



QUEENS

QUEENS 75 days

Fruits: Very good dark red, medium large, weighing about 5 ounces. Deep globe shape, smooth shoulders, shallow basin, small blossom scar; small locules with thick walls. Minimum radial cracking, little circumferential cracking. Fruits are firm, whether picked fully ripened or in blush.

Vine: Vigorous, somewhat open in habit with dark green foliage, intermediate in size, between Valiant and Rutgers. This habit gives adequate protection without interfering with spray program.

An excellent variety for early market and home gardeners; has also been used successfully by canners to extend the packing season.

MARZANO GRANDE 85 days

Fruits: Intense cherry red, distinctly pear shape but generally lobed with 3-4 cells and a distinct point at the blossom end. Walls same brilliant color as skin, moderately thick, granular in texture and low in juice content; fruits prolifically on compound clusters. Fruits approximately 3 ounces each.

Vines: Vigorous, indeterminate, much-branched, upright, open, leaves medium green, otherwise similar to San Marzano.

Marzano Grande sets fruit abundantly in the Central Valleys of California. It is unaffected by the hot sun and high temperatures, continuing to produce ripe fruits until a killing frost. Marzano Grande is much larger than San Marzano, but is equally well adapted to processing for tomato paste or dehydrated tomato products.

RED CAP 62-72 days

Fruits: Red, medium size, average $4\frac{1}{2}$ - $5\frac{1}{2}$ oz., smooth, deep flat globe with index about 0.85, small core, medium thick flesh with thick walls, juicy, occasionally cracks radially, 5-7 locules, fairly uniform.

Vines: Medium size plants, medium coarse foliage, fairly compact and dense, gives good coverage, usually productive in northern areas, hardy and vigorous.

RED JACKET 75-85 days

Fruits: Large 5-8 oz. Viewed from the side they are slightly oblong and flattened. In cross section the side walls appear slightly thin, but the central mass is solidly filled. Rich scarlet red inside color.

Vines: Vigorous, large "potato" leaves, dense foliage offering good fruit protection, spreads $3\frac{1}{2}$ -5'. Many branches; blossoms set freely.

Adapted to northern New York and Canada.

RED TOP (GENEVA 4000) 80 days

Fruit: A uniform, dark red, small, oblong to plum-shaped, 2-celled, thick-walled fruit with smooth shoulder, very shallow basin and small blossom scar. The fruit is free of circular and radial cracks, has a tough but easily peeled skin and a solid, mealy flesh of excellent color.

Vine: $3\frac{1}{2}$ -4' spread, procumbent, determinate, much-branched; fruiting prolifically on short, heavy compound spurs. Abundant foliage with small to medium sized leaflets which provide adequate coverage against sunscald, but the low, compact plants are easily sprayed.

The fruit of Red Top remains firm and marketable for a long time on the vine or in the hamper. The fruit is easily harvested, which minimizes fruit punctures from attached stems. This tends to reduce mold count.

A distinctly new type of tomato with many unique features. Its outstanding quality, as a raw product for production of puree and paste, will enable the eastern packers to expand their line. All packers of tomato products will appreciate the value of Red Top when used to fortify the color and flavor of the product of standard varieties, which may be going off-grade late in the season.



RED TOP

RUTGERS 73-83 days

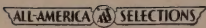
Fruits: Deep or dark scarlet, medium large, average $6\frac{1}{2}$ -8 oz., deep oblate with tendency to ridging, index about 0.85, very large pulpy core of almost same intense color as outer surface of fruit; very sparse seeder with locules compressed against outer wall of fruit, very solid and firm; no circular cracking and rarely found with radial cracks; milder flavor than MARGLOBE; 6-8 locules.

Vines: Heavy, vigorous, bushy growth, coarser foliage than MARGLOBE, medium dark green, very productive.

SAN MARZANO 80 days

Fruits: Scarlet red, $3\frac{1}{2}$ " long x $1\frac{1}{2}$ ", two celled, and borne in clusters. Mild flavor and little juice.

Vines: Medium, somewhat open and upright, heavy yielding, deep green foliage. Used by canners for whole canning and tomato paste and puree.

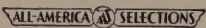
SCARLET DAWN  Gold Medal 1935 . . . 63-73 days
Fruits: Bright scarlet, full ripe color to stem end, smooth globular; index about 0.85, medium sized fleshy core, thick walled, solid, rarely shows cracking; 5-7 locules.

Vines: Medium size, with spreading branches, moderately coarse open foliage which affords fair coverage; medium green leaves; prolific.

SIoux 70 days
Fruits: Red, globular, thick walled, medium size, juicy, good flavor.
Vines: Open, leaves are finely divided. Developed at the Nebraska Experiment Station. Ripens uniformly.

STOKESDALE 66-75 days
Fruits: Bright scarlet, medium size, average 5½-6 oz., smooth, almost globe shape; index about 0.90, large pulpy core, solid flesh, free from cracking; 5-7 locules. Suitable for canning in northern areas.
Vines: Medium sized, with moderate amount of semi-erect and spreading, coarse foliage which gives fair coverage, medium green, productive. An early market variety, suitable for canning in the northern area.

STONE (NORTON'S) 78-89 days
Fruits: Scarlet, large, average 7-8 oz., smooth, irregular, flat globe with index about 0.76, medium to large core, fleshy, firm, occasionally cracks; 7-9 irregular locules.
Vines: Large plant, heavy, erect foliage, very dense giving good coverage to peak of harvest, very dark green leaves, productive and vigorous.

URBANA  H. M. 1951 78 days
Fruits: Deep scarlet; medium size about 5 ounces. Smooth shouldered, globe, small core, firm flesh, small locules.
Vines: Compact, determinate, low growing, spreading vine 48" across; large leaves, borne on short branches, affords excellent protection against sunscald; very prolific and rapid maturing.
A new canning variety for Middle West developed by Prof. W. A. Huelsen of the University of Illinois.

VALIANT 70 days
Fruits: Large for season of maturity, bright scarlet, oblate-globe shape; solid fleshed and excellent flavor.
Vine: Large, indeterminate, open and spreading; foliage sparse, inadequate coverage for late summer crops.
An accepted early variety in short season areas for home and market gardeners.

WISCONSIN 55 66-75 days
Fruits: Very good color, slightly wider than deep, generally larger than STOKESDALE and with better color and quality. Quite free from cracking and ridging.
Vines: Vigorous under fertile conditions, somewhat tolerant of early blight. Sunscald is not usually a problem. Developed by the University of Wisconsin. Popular as a canning variety.

PINK FRUITED or COLORLESS SKINNED, RED FLESHED VARIETIES

EARLY DETROIT 79-88 days

Fruits: Carmine, medium large, average $5\frac{1}{2}$ - $6\frac{1}{2}$ oz., fairly smooth, deep flat globe with index about 0.78, shallow medium sized core, medium fleshy, firm, fairly susceptible to radial cracking, 5-7 locules.

Vines: Medium size plant, medium dense foliage gives moderate coverage, medium green, fairly productive.

GULF STATE MARKET 80-90 days

Fruits: Pink to carmine, medium large 5-6 oz., smooth, nearly globular with index about 0.86, small core, firm, fleshy, thick walled, only occasional radial cracking, 5-8 locules. Used in Gulf States for canning and green-wrap shipping.

Vines: Medium sized plant, sprawling habit with up-curved tips giving moderately dense foliage and fair coverage, retarded determinate growth, giving appearance of being self-topping, dark green, moderately productive.

JUNE PINK (PINK EARLIANA) 62-72 days

Fruits: Most easily described as a pink fruited EARLIANA. Fairly free from concentric ringing and radial cracking.

Vines: Very much like EARLIANA.

OXHEART 90-100 days

Fruits: Bright pink, large, average 8-12 oz., fairly smooth, pointed ovate or "oxheart" shape, with index 1.10 to 1.40, small to medium core, very heavy flesh and placental development making very small locules pressed against outer wall; almost never cracks; 5-9 locules.

Vines: Very large plant, coarse, dense foliage, spreading, with upcurved tips giving good coverage during early harvest; medium slatey green, sparse set except on high levels of fertility. Home garden and local market type, valued chiefly for fruit size and distinctive shape.

PONDEROSA 90-100 days

Fruits: Rose or purplish-pink, very large, average 8-11 oz., fairly smooth skin but irregular and variable shape, mostly distinct oblate with index 0.50 to 0.60, many fruits are oval in cross-section, medium to large core, very fleshy, often cracks and has ridged surface; 7-12 irregular locules.

Vines: Large plant, heavy coarse foliage, moderately dense, gives good coverage, very spreading and branched, medium green leaves.

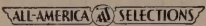
YELLOW FRUITED, ORANGE FLESHED VARIETIES

GOLDEN PONDEROSA (YELLOW PONDEROSA) 90-100 days

Fruits: Same as PONDEROSA but bright golden yellow.

Vines: Same as PONDEROSA.

GOLDEN QUEEN (TROPHY) 80-89 days
 Fruits: Deep golden yellow, medium size, average 4½-5½ oz., smooth, occasionally becoming russeted and pink blushed on portions of fruit exposed to sunlight, deep flat globe with index about 0.85, small core, firm, meaty, rarely cracks, mild flavored; 4-6 locules.
 Vines: Medium large plant, moderately dense foliage, giving good coverage, bright medium green, prolific, fairly heat and drought tolerant.

JUBILEE  **Bronze Medal 1943** 80 days
 Fruits: Large, globular, smooth, bright golden orange, mild flavored and of excellent quality. Interior meaty, thick walled and with few seeds.
 Vines: Identical with **RUTGERS**.

SMALL FRUITED VARIETIES

LARGE RED PLUM 75-82 days
 Fruits: Italian type, deep scarlet, small size, average 2-3 oz., ovate, with almost square cross section, index 1.7 to 2.2; usually 2 loculed characterized by pepper-like placenta separate and distinct from outer wall; thick fleshed, dry, deep scarlet. Used in paste and puree.
 Vines: Medium sized, more erect than other varieties, somewhat open; fruit borne in clusters or hanks, very prolific.

RED CHERRY 78-85 days
 Fruits: Scarlet, very small, being about cherry size, smooth globe; 2-3 locules. Used for preserving.
 Vines: Large plant with spreading, much branched foliage, dense and dark green, very prolific.

RED PEAR 78-85 days
 Fruits: Small distinct pear shape, otherwise same as **RED CHERRY**.
 Vines: Same as **RED CHERRY**.

YELLOW CHERRY 78-85 days
 Same fruit and vine as **RED CHERRY** but fruit color is dark yellow.

YELLOW PEAR 78-85 days
 Fruit and vines same as **RED PEAR**, but fruit color is medium yellow.

YELLOW PLUM 78-85 days
 Fruit and vines same as **RED PLUM**, but fruit color is medium yellow.

TURNIP

Brassica rapa

WHITE FLESHED VARIETIES

COWHORN (LONG WHITE) 70-75 days
 Roots: 9-12 x 2½-3", long, tapered, white, light green shoulder on portion exposed above ground, fairly smooth, occasionally twisted roots, medium to large tap roots; flesh white, sweet and tender. Used chiefly for stock food but very palatable while small and young.
 Tops: 18-22", medium green, erect, coarsely toothed leaves.

EARLY WHITE FLAT DUTCH 40-45 days

Roots: $1\frac{1}{2}$ -2 x $3\frac{1}{2}$ -4 $\frac{1}{2}$ " , distinct flat globe, white, smooth, small tap root; flesh white, tender, fine grained, sweet. Early variety used in South for home garden and local market.

Tops: 10-14" , medium green, strap leaved, erect, small collar.

POMERANIAN WHITE GLOBE (LARGE WHITE GLOBE, NORFOLK) 75-80 days

Roots: 4-5 $\frac{1}{2}$ " in diameter, globe to flattened globe, white skin and flesh; smooth, solid, moderately coarse textured.

Tops: 18-24" , medium light green, semi-erect, cut leaved.

PURPLE TOP MILAN (EXTRA EARLY PURPLE TOP MILAN) . . . 40-45 days

Roots: 3-4" in diameter, very flat, white with purplish-red tops, smooth, small tap root; flesh snow-white, tender, sweet. Excellent early home garden and forcing type.

Tops: 10-12" , medium green, strap leaved, erect, small collar.

PURPLE TOP STRAP LEAVED (EARLY FLAT RED) 45-48 days

Roots: 3 $\frac{1}{2}$ -5" in diameter, distinctly oblate, white with purple top on portion of root above ground, smooth, small tap root; flesh is snow-white, mild flavored, sweet.

Tops: 14-18" , medium green, obovate strap leaved, erect, medium collar.



RESELECTED PURPLE TOP WHITE GLOBE

RESELECTED PURPLE TOP WHITE GLOBE (RED TOP WHITE GLOBE) 58-63 days
 Roots: 3½-4 x 3½-4½", globe to slightly flattened globe, clear white with purplish tinged red top, smooth, small tap root; flesh is snow white, tender and crisp; very succulent.
 Tops: 12-16", medium green, notched, spiny leaves terminating in small, compact collar, which makes for erect growth.

SEVEN TOP (SOUTHERN PRIZE)
 Grown as winter annual in South for greens; very prolific sprouting of leaves early in spring make rapid, tender growth and produce heavy yield of good quality foliage for food; roots are woody, tough and inedible.

SHOGGIN (JAPANESE FOLIAGE) 35-40 days
 Roots: 2-4 x 1½-2½", medium size, oval, snowy white, mild, tender and crisp; useful as dual purpose crop for roots and greens.
 Tops: 18-22" tall, bright green, strap leaved, vigorous and fast growing, heavy set of fine leaves, very erect from small collar, gives excellent quality greens; foliage partially resistant to aphids.

SNOWBALL (WHITE SIX WEEKS) 42-47 days
 Roots: 2½-3" in diameter, globular, uniform, ivory white, smooth, small tap root; flesh juicy, crisp, sweet, fine-grained. Used as home garden and forcing strain.
 Tops: 10-14", erect, medium yellow green, cut leaved.

WHITE EGG 52-57 days
 Roots: 3-4 x 2½-3", ovate or egg-shaped, white, occasionally green tinged on exposed portion of shoulder, smooth, small tap root; flesh translucent white, tender, sweet.
 Tops: 13-17", compact, erect, medium green, cut leaved, small collar.

WHITE MILAN (EXTRA EARLY WHITE MILAN) 40-45 days
 Roots: Same as PURPLE TOP MILAN but clear white skin.
 Tops: Same as PURPLE TOP MILAN.

YELLOW FLESHED VARIETIES

AMBER GLOBE (YELLOW GLOBE, YELLOW STONE) 73-76 days
 Roots: 4½-6" in diameter, globular, yellow with bronzy tops, smooth, small to medium tap root; flesh creamy yellow, medium to coarse textured, good quality. Used chiefly for stock feed, but suitable for table use when young.
 Tops: 15-19", green, erect, cut leaved.

GOLDEN BALL (ORANGE JELLY) 60-65 days
 Roots: 3-4" in diameter, globular, deep yellow, smooth, small to medium tap root; flesh bright yellow, fine grained, solid, good quality. Used for home garden and local market.

PURPLE TOP YELLOW ABERDEEN 75-80 days
 Roots: 4½-5½" in diameter, globular, medium yellow with purplish red shoulder, smooth, medium tap root; flesh light yellow, firm, high quality, good storage type. Chiefly grown for stock but also suitable for winter table use.
 Tops: 16-20", medium blue green, broad, compact, coarsely toothed.

R U T A B A G A o r S W E D E

Brassica napobrassica

AMERICAN PURPLE TOP 85-90 days
 Roots: 6-9 x 3½-5½", large, short top shape, buff with purple top; flesh firm, medium textured and light buff.
 Tops: 16-20", vigorous, erect, medium blue green, smooth, cut leaved, based on medium collar; rarely necked at crown.

LONG ISLAND IMPROVED, NEYLON STRAIN 85-90 days
 Roots: 6-8 x 3½-5", large, short top, deep buff with purple top; flesh is firm, tender, fine textured and light buff. Our stock specially selected for uniformity of growth, sparseness of fibrous roots, and smoothness of skin.
 Tops: 16-20", vigorous, hardy, erect, blue green; smooth, partially toothed leaves based on small neckless collar.

MACOMBER, (SWEET GERMAN, SWEET RUSSIAN, WHITE SWEDE) 89-92 days
 Roots: 6-9 x 4½-6½", large, short, thick top shape, white with bronzed green shoulder, medium neck, flesh creamy white, solid, sweet. Used for winter storage for table use and stock feed.
 Tops: 16-22", vigorous and hardy, semi-erect, dark blue green, cut leaved, based on medium neck.

W A T E R M E L O N

Citrullus vulgaris

BLACKLEE 95 days
 An excellent southern shipping variety, highly resistant to fusarium wilt and good also for local trucking. The fruits are cylindrical and blocky, averaging about 30 lbs. It has a tough, thick dark green rind, and deep red flesh of the finest quality. The medium sized seeds are black.

BLUE RIBBON (BLUE RIBBON KLONDIKE) 85 days
 A development from STRIPED KLONDIKE by the California Agricultural Experiment Station. Resistant to fusarium wilt, but otherwise similar to STRIPED KLONDIKE.

CITRON, COLORADO RED SEEDED 90-95 days
 A small, round melon, usually 7-8" in diameter, used for preserving. The flesh is white and is unpalatable in the raw state. Seeds are large and a pale red.

CITRON, GREEN SEEDED 90-95 days
Same as RED SEEDED CITRON, but slightly larger and with glossy green seeds.

COLE'S EARLY (HARRIS' EARLIEST) 75-80 days
An old standard northern variety for home garden and local markets. Fruits are broad oval, and weigh 15-20 lbs. The flesh is red and of fair quality. The rind is dark green with lighter green stripes, thin and tender. Seeds are black and of medium size.

CONGO (U.S.D.A. 46-40) ALL-AMERICA SELECTION Bronze Medal 1950 . . 90 days
A new variety developed by the U.S.D.A. Vegetable Breeding Laboratory at Charleston, S. C. It is resistant to anthracnose, which gives it great promise. The fruits are similar to DARLINGTON, weigh 32-40 lbs., and have a very tough rind which is dark green with darker green stripes. The flesh is a very bright red, medium grain, and ripens well out to the rind. The seeds are very light tan, with side markings of darker tan. An excellent shipping variety.

DARLINGTON (GARRISON, COKER) 85-90 days
A very large and sweet melon for local southern markets, with fruits that weigh 30-40 lbs. The flesh is bright red, sweet and tender, the rind thin and tender with irregular dark green stripes and veining on a light background. The seeds are white.



DIXIE QUEEN

DIXIE QUEEN (WHITE SEEDED CUBAN QUEEN) 80-85 days
One of the most popular varieties in the South for shipping and in the North as well. Fruits weigh 30-35 lbs., and are nearly round with square ends. The skin is light green with dark green stripes, the rind thin and tough. The bright red flesh is of finest quality, and the seeds are small and white.

DIXIE QUEEN, WILT RESISTANT 80-85 days
This strain differs from the regular Dixie Queen in being resistant to fusarium wilt, with a tougher rind, redder flesh and somewhat larger seeds.

DUDE CREEK 87-92 days
A large, long, cylindrical melon with blunt ends and a hard, thin rind which is very light green with irregular stripes of dark green. In the South it is used for local markets and distant shipping. The flesh is bright red, sweet and solid. Seeds are white, edged with light brown.

★**EARLY BIRD** 75-80 days
This is one of the "icebox" types of melon, which has really good quality, though small in size. Fruits are globular to slightly elongated, 8-10" in length and weigh 5-8 lbs. Under Florida conditions size may be somewhat larger. The rind is thin, medium tough, medium green with inconspicuous dark green broken stripes. The flesh is medium red to pink and medium fine grained. The seeds are very small, dark brown. This melon matures in Connecticut early in August.



FAIRFAX

FAIRFAX (48-12) 85-90 days

A new release from the United States Department of Agriculture Regional Vegetable Breeding Laboratory at Charleston, South Carolina. This is the first dependable, wilt-resistant variety possessing resistance to anthracnose, a characteristic which alone should give it an advantage over most other varieties except Congo.

Fairfax has an oblong fruit, with sharply contrasting dark green stripes over a medium green background, averaging 35 pounds each. The melons are similar to Garrison in shape and color, but are distinguished by the harder rind. It is substantially earlier than most other wilt-resistant varieties; usually develops to a better size and has better shipping qualities than the tender rind varieties. Fairfax will not develop Hollow Heart at maturity and should be left on the vine until maximum size and full ripeness to minimize danger of pale flesh of immature fruits. The flesh is good red color, equalling that of best varieties; flavor excellent, texture very good, seed similar to Garrison but having a black tip.

Fairfax is the best disease resistant variety available for use by growers of large acreages of watermelon for shipment.

FLORIDA FAVORITE 88-92 days

The large, cylindrical fruits run from 24 to 28 lbs. in weight, the rind is light green with dark green stripes and is fairly tough. The flesh is bright red and of high quality, the seeds white. Used in the South in home and market gardens.

FLORIDA GIANT (CANNON BALL, BLACK DIAMOND) 90-95 days

A fine shipper, vigorous and productive, with fruits averaging about 40 lbs., large, nearly round and with a hard, tough and very dark green rind. The flesh is bright red, coarse grained, high quality and firm. The seeds are large, mottled dark brown.

HALBERT'S HONEY 85 days

A melon similar to KLECKLEY'S SWEET, with large, cylindrical, blunt ended fruits which grow to 30-35 lbs. The rind is tender and thin, dark green and lightly veined. The flesh is bright red and of fine flavor, the seeds medium sized, white with black tip.

IRISH GRAY 87-92 days

Very productive and a good shipper. The fruits weigh 30-35 lbs., and are oblong. The flesh is bright red and fiberless, the rind very tough, gray-green, the seeds white.

KLECKLEY'S SWEET (WONDERMELON, IMPROVED KLECKLEY) 85 days

Not suitable for shipping, but ideal for home gardens, with fruits weighing 30-35 lbs., large, cylindrical, dark green with slight ribbing. The rind is thin and tender, the flesh bright red, high quality; the seeds large, white with occasional traces of brown.

KLONDIKE R 7 80-85 days
A variety resistant to fusarium wilt, developed at the College of Agriculture, Davis, California. Fruits average about 25 lbs., are oblong and taper slightly at the blossom end. The dark green rind is thin but tough. The flesh is a brilliant red, the seeds small and vary from tan to black.

LEESBURG 85-90 days
A development from KLECKLEY'S SWEET by Dr. M. N. Walker of the Florida Experiment Station, and the fruits resemble that variety but are shorter and more blocky, weighing 25-28 lbs. The variety is wilt resistant. The rind is dark green and tough, the flesh light red and very sweet, with medium sized, white seeds.

MOUNTAIN HOOSIER 90 days
A very large, oval-round melon with blunt ends, which reaches a weight of 50-60 lbs. It has a dark green, tough rind, bright red flesh of finest quality. The medium sized seeds are white, edged with black.

NANCY HANKS 85 days
A variety with a rind tough enough for long distance shipping. The fruits are round with dark green stripes on a lighter green ground, and average about 30 lbs. The flesh is of good quality, bright red, with white seeds.

PEACOCK 85 days
Similar in many respects to Black Seeded Klondike but with a much tougher rind. Melons oblong, blocky ends, many slightly furrowed lengthwise; 15 to 17 inches long and 9 inches in diameter. Skin dark green. Flesh distinct orange-red, good quality. Seeds very small, nearly black. Particularly adapted for use on the Pacific Coast.

PEERLESS (ICE CREAM) 85-90 days
A good home garden melon with medium size, oval fruits, 18-20 lbs. The rind is thin, bright green with darker green veining. The flesh is of good quality, bright red, with white seeds of medium size.

NEW HAMPSHIRE MIDGET (NEW) 82 days
A new icebox type Watermelon, which is rapidly gaining in popularity in many sections. Because this variety is extremely early in maturity it will ripen in many sections where other varieties do not mature. Vines are small, vigorous and very prolific, producing a large number of fruit, approximately 5-6 inches in diameter. Color mottled light green with medium red flesh and black seed. Has a thin rind.

STONE MOUNTAIN 90 days
The rind of this melon is hard and fairly tough, medium green with slight veining. The fruits are very large, 35-40 lbs., round-oval with blunt ends. The flesh is bright red, very sweet and of good quality. The seeds are medium sized, white with black tip.



STONE MOUNTAIN

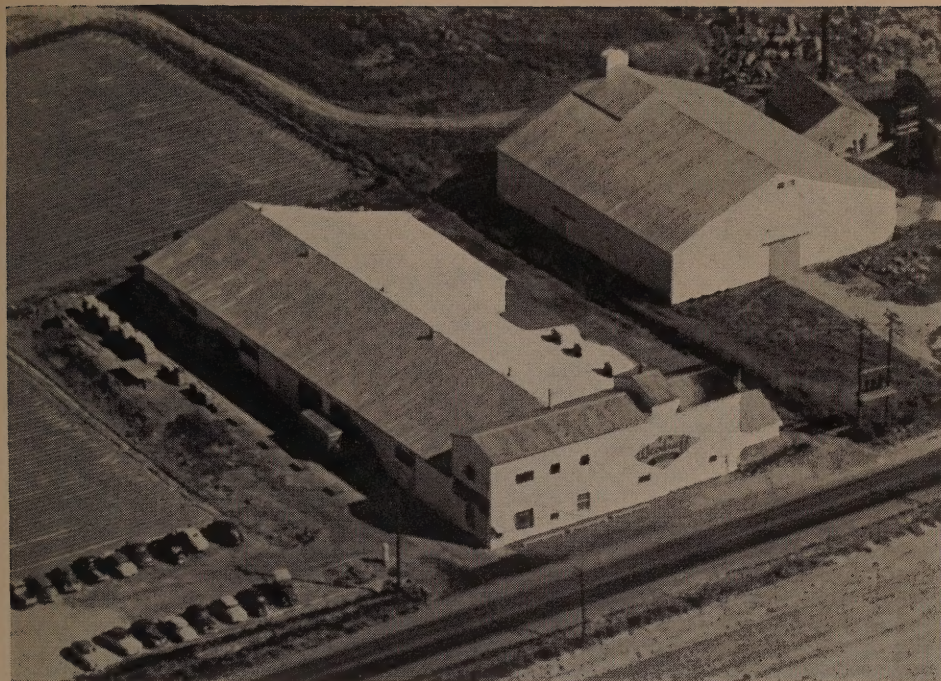
TENDERSWEET (LONG LUCIOUS GOLDEN HONEY) 75-80 days
 The flesh of this melon is a golden yellow, the fruits long and cylindrical, weighing 30-35 lbs. The rind is dark green with a lighter green stripe, and thick enough to ship well.

TOM WATSON 90-95 days
 A standard shipping variety weighing 35-40 lbs. Fruits are very large, cylindrical, with a thin but tough rind which is a dark green with fine veining of even darker green. The flesh is dark red and firm, with large, brown seeds.

CERTIFIED SEED

We offer Certified and Approved strains of many varieties of the following seeds:

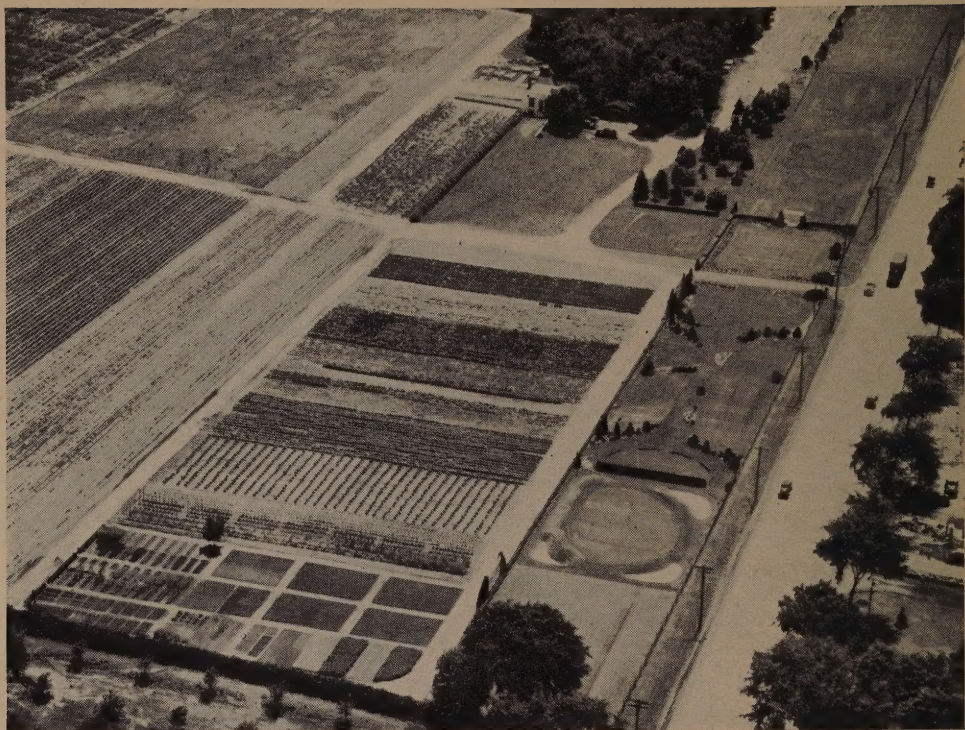
- Green and Wax Beans (Idaho Approved)**
- Tomato (New Jersey and Michigan Certified)**
- Watermelon (Oklahoma and California Certified)**



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